FILE 'HOME' ENTERED AT 13:18:58 ON 03 APR 2008

=> file polymer medline embase biosis
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 0.21 0.21

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FILE 'USPATFULL' ENTERED AT 13:19:26 ON 03 APR 2008
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FILE 'USPATOLD' ENTERED AT 13:19:26 ON 03 APR 2008
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 13:19:26 ON 03 APR 2008
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FILE 'BIOSIS' ENTERED AT 13:19:26 ON 03 APR 2008
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=> s chitosan
L1      115917 CHITOSAN

=> s l1 and (radiation or irradiation or microwave)
L2       10733 L1 AND (RADIATION OR IRRADIATION OR MICROWAVE)

=> s l2 and (electrolyte or chloride)
L3        6604 L2 AND (ELECTROLYTE OR CHLORIDE)

=> s l3 and oligo?
  16 FILES SEARCHED...
L4        3760 L3 AND OLIGO?

=> s l2 and microwave
L5        1800 L2 AND MICROWAVE

=> s l5 and (chloride or electrolyte)
L6        1176 L5 AND (CHLORIDE OR ELECTROLYTE)

=> s l5 and chloride
L7        1159 L5 AND CHLORIDE

=> s l5 and (sodium or potassium or calcium or iron or ferric)
  23 FILES SEARCHED...
L8        1377 L5 AND (SODIUM OR POTASSIUM OR CALCIUM OR IRON OR FERRIC)
```

```
=> s l8 and acid?
  15 FILES SEARCHED...
L9        1326 L8 AND ACID?

=> s l9 and (molecular(a)weight)
  19 FILES SEARCHED...
L10        905 L9 AND (MOLECULAR(A) WEIGHT)

=> s l10 and (degree(a)polymeriz?)
L11          3 L10 AND (DEGREE(A) POLYMERIZ?)

=> dis l11 1-3 bib abs

L11  ANSWER 1 OF 3  USPATFULL on STN
AN     2004:334435  USPATFULL
TI     Ink-jet recording material and method for preparing the same
IN     Sakaguchi, Hiroshi, Tokyo, JAPAN
       Tokunaga, Yukio, Tokyo, JAPAN
PI     US 2004265514       A1  20041230
AI     US 2004-874216      A1  20040624 (10)
PRAI   JP 2003-184605      20030627
       JP 2003-362495      20031022
DT     Utility
FS     APPLICATION
LREP   BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN   Number of Claims: 17
ECL    Exemplary Claim: 1
DRWN   No Drawings
LN.CNT 1094
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     There are disclosed an ink-jet recording material comprising a support
       and at least one ink-receptive layer provided on the support, wherein at
       least one of the ink-receptive layers contains inorganic particles
       having an average secondary particle size of about 500 nm or less, a
       resin binder having a keto group as a resin binder and a compound having
       two or more primary amino groups in the molecule, and a method for
       preparing the same.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11  ANSWER 2 OF 3  USPATFULL on STN
AN     2001:25546  USPATFULL
TI     Support for imaging material
IN     Tsubaki, Masayuki, Tokyo, Japan
       Noda, Touru, Tokyo, Japan
PA     Mitsubishi Paper Mills Limited, Tokyo, Japan (non-U.S. corporation)
PI     US 6190781          B1  20010220
AI     US 1999-233096          19990119 (9)
PRAI   JP 1998-8868        19980120
       JP 1999-2880        19990108
DT     Utility
FS     Granted
EXNAM  Primary Examiner: Hess, Bruce H.
LREP   Pillsbury Winthrop LLP
CLMN   Number of Claims: 15
ECL    Exemplary Claim: 1
DRWN   No Drawings
LN.CNT 1357
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB     The task of the present invention is to provide an excellent
       resin-coated paper type support for imaging materials using a paper as a
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base which can provide imaging materials and prints made therefrom superior in visual gloss, cutting properties and curling properties. This task is attained by a support for imaging materials which comprises a paper mainly composed of natural pulp as a base, a resin layer (A) comprising a resin having film-formability coated on one side of the paper base on which an image forming layer is provided-and a resin layer (B) mainly composed of a polyethylene resin coated on another side of the paper base, wherein the natural pulp has a fiber length of 0.60 mm or less, the paper base has a density of 1.05 g/cm.sup.3 or more, and the resin layer (B) mainly composed of a polyethylene resin is coated at 200 m/min or more.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 3 OF 3 USPATFULL on STN
AN 91:68862 USPATFULL
TI Moldable compositions of activated carbon and molded articles produced therefrom
IN Takeuchi, Tatsuro, Moriyama, Japan
Kameno, Masaaki, Kakogawa, Japan
PA Takeda Chemical Industries, Ltd., Osaka, Japan (non-U.S. corporation)
PI US 5043310 19910827
AI US 1990-467411 19900119 (7)
PRAI JP 1989-11458 19890119
DT Utility
FS Granted
EXNAM Primary Examiner: Garvin, Patrick P.; Assistant Examiner: Peebles, Brent M.
LREP Wegner, Cantor, Mueller & Player
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 518
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A moldable composition is disclosed which comprises activated carbon and a polysaccharide of natural origin in an amount of 0.1-10 parts by weight in relation to 100 parts by weight of the activated carbon.

There is further disclosed a process of producing molded articles of activated carbon using the composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s chitosan(s)oligo?
16 FILES SEARCHED...
L12 5892 CHITOSAN(S) OLIGO?

=> s l12 and microwave
L13 151 L12 AND MICROWAVE

=> s l13 and (electrolyte or chloride)
L14 113 L13 AND (ELECTROLYTE OR CHLORIDE)

=> s l14 and acid
L15 112 L14 AND ACID

=> s l15 and (degree(w)polymer?)
11 FILES SEARCHED...
L16 0 L15 AND (DEGREE(W) POLYMER?)

```
=> s l15 and (degree(s)polymer?)
  11 FILES SEARCHED...
L17         90 L15 AND (DEGREE(S) POLYMER?)

=> s l17 and Da
L18         48 L17 AND DA

=> dis l18 1-48 bib abs

L18  ANSWER 1 OF 48  IFIPAT  COPYRIGHT 2008 IFI on STN
AN    11439913  IFIPAT;IFIUDB;IFICDB
TI    LOW MOLECULAR WEIGHT CHITOSAN OLIGOSACCHARIDES AND
      ITS PREPARATION METHOD
INF   Li; Pengcheng, Shandong, CN
      Liu; Song, Shandong, CN
      Xing; Ronge, Shandong, CN
      Yu; Huahua, Shandong, CN
IN    Li Pengcheng (CN); Liu Song (CN); Xing Ronge (CN); Yu Huahua (CN)
PAF   INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, 266071, CN
PA    INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES CN
PPA   Institute of Oceanology Chinese Academy of Sciences CN (Probable)
AG    SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON,
      DC, 20036, US
PI    US 2007089978   A1  20070426
AI    US 2003-560296      20031008
      WO 2003-CN847       20031008
                          20051212  PCT 371 date
                          20051212  PCT 102(e) date
PRAI  CN 2003-138817      20030716
FI    US 2007089978       20070426
DT    Utility; Patent Application - First Publication
FS    CHEMICAL
      APPLICATION
ED    Entered STN: 26 Apr 2007
      Last Updated on STN: 7 May 2007
CLMN  11
GI     7 Figure(s).
     FIG. 1 is a FTIR spectrum of chitosan.
     FIG. 2 is a FTIR spectrum of low molecular weight chitosan
      oligosaccharides obtained under acid solvent containing
      NaCl.
     FIG. 3 is a FTIR spectrum of low molecular weight chitosan
      oligosaccharides obtained under acid solvent containing
      KCl.
     FIG. 4 is a FTIR spectrum of low molecular weight chitosan
      oligosaccharides obtained under acid solvent containing
      CaCl2.
     FIG. 5 is a FTIR spectrum of low molecular weight chitosan
      oligosaccharides obtained under pure acid solvent.
     FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan
      oligosaccharides.
     FIG. 7 is a characteristic structure of chitosan
      oligosaccharides.
AB    The present invention relates to low molecular weight chitosan
      oligosaccharides and its preparation method. Chitosan
      oligosaccharides were obtained under microwave
      irradiation assisted the electrolyte. The method of preparing
      chitosan oligosaccharides was described as follows:
      acid solvent containing electrolyte was added to
      chitosan. The reaction was performed at 480800 W for 312 min.
      After irradiation ceased, the reaction liquid was cooled to room
```

temperature. Then the solution was adjusted to neutrality with 110 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CLMN 11 7 Figure(s).

FIG. 1 is a FTIR spectrum of chitosan.

FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.

FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.

FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.

FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.

FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.

FIG. 7 is a characteristic structure of chitosan oligosaccharides.

L18 ANSWER 2 OF 48 USPATFULL on STN

AN 2007:342045 USPATFULL

TI Anti-scarring drug combinations and use thereof

IN Hunter, William L., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Grau, Daniel S., Arlington, MA, UNITED STATES
Borisy, Alexis, Arlington, MA, UNITED STATES
Keith, Curtis T., Boston, MA, UNITED STATES
Auspitz, Benjamin A., Cambridge, MA, UNITED STATES
Nichols, M. James, Boston, MA, UNITED STATES
Jost-Price, Edward Roydon, West Roxbury, MA, UNITED STATES
Serbedzija, George N., Sudbury, MA, UNITED STATES

PI US 2007299043 A1 20071227

AI US 2007-732808 A1 20070404 (11)

RLI Continuation-in-part of Ser. No. US 2006-542185, filed on 3 Oct 2006, PENDING

PRAI US 2005-723053P 20051003 (60)

DT Utility

FS APPLICATION

LREP CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110, US

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 17 Drawing Page(s)

LN.CNT 37332

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides devices or implants that comprise anti-scarring drug combinations, methods or making such devices or implants, and methods of inhibiting fibrosis between the devices or implants and tissue surrounding the devices or implants. The present invention also provides compositions that comprise anti-fibrotic drug combinations, and their uses in various medical applications including the prevention of surgical adhesions, treatment of inflammatory

arthritis, treatment of scars and keloids, the treatment of vascular disease, and the prevention of cartilage loss.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 3 OF 48 USPATFULL on STN
AN 2007:291134 USPATFULL
TI COMPOSITIONS AND METHODS FOR TREATING DIVERTICULAR DISEASE
IN Hunter, William L., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Avelar, Rui, Vancouver, CANADA
Guan, Dechi, Vancouver, CANADA
PA ANGIOTECH INTERNATIONAL AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2007254833 A1 20071101
AI US 2007-775816 A1 20070710 (11)
RLI Continuation of Ser. No. US 2005-129763, filed on 12 May 2005, GRANTED, Pat. No. US 7241736 Continuation-in-part of Ser. No. US 2004-986230, filed on 10 Nov 2004, PENDING
PRAI US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
US 2003-524023P 20031120 (60)
US 2003-523908P 20031120 (60)
US 2003-518785P 20031110 (60)
DT Utility
FS APPLICATION
LREP BRIAN R. WOODWORTH, 275 N. FIELD DRIVE, DEPT. NLEG BLDG H-1, LAKE FOREST, IL, 60045-2579, US
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 18500
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Agents, compositions, and implants are provided herein for treating diverticular disease (e.g., diverticulosis and diverticulitis). In particular, fibrosis-inducing agents, hemostatic agents, and/or anti-infective agents, or compositions containing one or more of these agents are provided for use in methods for treating diverticular disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 4 OF 48 USPATFULL on STN
AN 2007:237758 USPATFULL
TI Anti-scarring drug combinations and use thereof
IN Hunter, William L., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Grau, Daniel S., Arlington, MA, UNITED STATES
Borisy, Alexis, Arlington, MA, UNITED STATES
Keith, Curtis T., Boston, MA, UNITED STATES
Auspitz, Benjamin A., Cambridge, MA, UNITED STATES
Nichols, M. James, Boston, MA, UNITED STATES
Jost-Price, Edward Roydon, West Roxbury, MA, UNITED STATES
Serbedzija, George N., Sudbury, MA, UNITED STATES
PI US 2007208134 A1 20070906
AI US 2006-542185 A1 20061003 (11)
PRAI US 2005-723053P 20051003 (60)
DT Utility
FS APPLICATION
LREP CLARK & ELBING LLP, 101 FEDERAL STREET, BOSTON, MA, 02110, US

CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN 17 Drawing Page(s)
LN.CNT 37771
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides devices or implants that comprise anti-scarring drug combinations, methods or making such devices or implants, and methods of inhibiting fibrosis between the devices or implants and tissue surrounding the devices or implants. The present invention also provides compositions that comprise anti-fibrotic drug combinations, and their uses in various medical applications including the prevention of surgical adhesions, treatment of inflammatory arthritis, treatment of scars and keloids, the treatment of vascular disease, and the prevention of cartilage loss.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 5 OF 48 USPATFULL on STN
AN 2007:236812 USPATFULL
TI Tear and abrasion resistant expanded material and reinforcement
IN Scanlon, John James, Wilmington, DE, UNITED STATES
Scanlon, Catherine Ann, Wilmington, DE, UNITED STATES
PI US 2007207186 A1 20070906
AI US 2007-713361 A1 20070303 (11)
PRAI US 2006-779128P 20060304 (60)
DT Utility
FS APPLICATION
LREP John J. Scanlon, 1308 Hillside Blvd, Wilmington, DE, 19803, US
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 7752
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is a more durable expanded material that enables thinner wall thicknesses and a more flexible reinforcement suitable for stenting. The present invention is especially useful in the construction of grafts, stents, and stent-grafts which are used, for example, in repairing or replacing blood vessels that are narrowed or occluded by disease, aneurismal blood vessels, or other medical treatments. The inventive material and configurations allow expansion or contraction in size or adjustment in size in an incremental manner so that the optimum size, shape, and fit with other objects can be obtained. The present invention is also optionally capable of more accurately delivering one or more active ingredients such as drugs over longer periods of time. The present invention optionally includes surface modifications and additives that increase the surface adhesion of active ingredients, coatings, or combinations thereof. Finally, the present invention optionally includes growing cells on the inventive material so that the expanded material, reinforcement, or combinations thereof are useful, for example, in producing lab-grown blood vessels or organs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 6 OF 48 USPATFULL on STN
AN 2007:170809 USPATFULL
TI Water-soluble compound
IN Tuszynski, Jack, Edmonton, CANADA
Greenwald, Howard J., Rochester, NY, UNITED STATES
Curry, Stephen H., Rochester, NY, UNITED STATES
Goss, Kendrick, Brighton, MA, UNITED STATES
PI US 2007149496 A1 20070628

AI US 2004-923615 A1 20040820 (10)
RLI Continuation-in-part of Ser. No. US 2004-878905, filed on 28 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING
PRAI US 2003-516134P 20031031 (60)
DT Utility
FS APPLICATION
LREP Michael L. Weiner, Technology Innovations, Suite 215, 150 Lucius Godon Drive, West Henrietta, NY, 14586, US
CLMN Number of Claims: 97
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 11268
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A water-soluble magnetic anti-mitotic compound with a water-solubility of at least 100 micrograms per milliliter, a molecular weight of at least 150 grams per mole, a mitotic index factor of at least 10 percent, a positive magnetic susceptibility of at least 1,000+10.sup.-6 cgs, and a magnetic moment of at least 0.5 bohr magnetrons, wherein said compound is comprised of at least 7 carbon atoms and at least one inorganic atom with a positive magnetic susceptibility of at least 200+10.sup.-6 cgs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 7 OF 48 USPATFULL on STN
AN 2007:106580 USPATFULL
TI Water-soluble compound
IN Tuszynski, Jack A., Edmonton, CANADA
Greenwald, Howard J., East Rochester, NY, UNITED STATES
Curry, Stephen H., Rochester, NY, UNITED STATES
Goss, Kendrick, Brighton, MA, UNITED STATES
PI US 2007092549 A1 20070426
AI US 2005-63441 A1 20050223 (11)
RLI Continuation of Ser. No. US 2004-923615, filed on 20 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-878905, filed on 28 Jun 2004, PENDING
PRAI US 2003-516134P 20031031 (60)
DT Utility
FS APPLICATION
LREP BUCHANAN, INGERSOLL & ROONEY PC, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404, US
CLMN Number of Claims: 20
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 11303
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A water-soluble magnetic anti-mitotic compound with a water-solubility of at least 100 micrograms per milliliter, a molecular weight of at least 150 grams per mole, a mitotic index factor of at least 10 percent, a positive magnetic susceptibility of at least 1,000+10.sup.-6 cgs, and a magnetic moment of at least 0.5 bohr magnetrons, wherein said compound is comprised of at least 7 carbon atoms and at least one inorganic atom with a positive magnetic susceptibility of at least 200+10.sup.-6 cgs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 8 OF 48 USPATFULL on STN
AN 2007:104016 USPATFULL
TI Low molecular weight chitosan oligosaccharides and its preparation method
IN Li, Pengcheng, Shandong, CHINA
Xing, Ronge, Shandong, CHINA
Liu, Song, Shandong, CHINA
Yu, Huahua, Shandong, CHINA
PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, CHINA, 266071 (non-U.S. corporation)
PI US 2007089978 A1 20070426
AI US 2003-560296 A1 20031008 (10)
WO 2003-CN847 20031008
20051212 PCT 371 date
PRAI CN 2003-138817 20030716
DT Utility
FS APPLICATION
LREP SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480.about.800 W for 3.about.12 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 1.about.10 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 9 OF 48 USPATFULL on STN
AN 2007:30854 USPATFULL
TI Water-soluble compound
IN Tuszynski, Jack A., Edmonton, CANADA
Greenwald, Howard J., East Rochester, NY, UNITED STATES
Curry, Stephen H., Rochester, NY, UNITED STATES
Goss, Kendrick, Brighton, MA, UNITED STATES
PI US 2007027129 A1 20070201
AI US 2005-64247 A1 20050223 (11)
RLI Continuation of Ser. No. US 2004-923615, filed on 20 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-878905, filed on 28 Jun 2004, PENDING
PRAI US 2003-516134P 20031031 (60)
DT Utility

FS APPLICATION
LREP BUCHANAN, INGERSOLL & ROONEY PC, POST OFFICE BOX 1404, ALEXANDRIA, VA, 22313-1404, US
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 11412
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A water-soluble magnetic anti-mitotic compound with a water-solubility of at least 100 micrograms per milliliter, a molecular weight of at least 150 grams per mole, a mitotic index factor of at least 10 percent, a positive magnetic susceptibility of at least 1,000+10.sup.-6 cgs, and a magnetic moment of at least 0.5 bohr magnetrons, wherein said compound is comprised of at least 7 carbon atoms and at least one inorganic atom with a positive magnetic susceptibility of at least 200+10.sup.-6 cgs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 10 OF 48 USPATFULL on STN
AN 2007:17006 USPATFULL
TI Steroid analogs and characterization and treatment methods
IN Reading, Christopher L., San Diego, CA, UNITED STATES
Frincke, James M., San Diego, CA, UNITED STATES
Dowding, Charles, San Diego, CA, UNITED STATES
PI US 2007014719 A1 20070118
AI US 2005-241670 A1 20050929 (11)
PRAI US 2004-614869P 20040929 (60)
DT Utility
FS APPLICATION
LREP HOLLIS-EDEN PHARMACEUTICALS, INC., 4435 EASTGATE MALL, SUITE 400, SAN DIEGO, CA, 92121, US
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 24267
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to methods to characterize exemplified compounds such as 3β, 17β-dihydroxyandrost-1,5,11 -triene and 3β, 17β-dihydroxy-17α-ethynylandrost-1,5,11-triene and to the use of described compounds to ameliorate or treat a condition such as thrombocytopenia, inflammation or other exemplified conditions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 11 OF 48 USPATFULL on STN
AN 2007:12286 USPATFULL
TI Medical device with low magnetic susceptibility
IN Wang, Xingwu, Wellsville, NY, UNITED STATES
Greenwald, Howard J., Rochester, NY, UNITED STATES
PI US 2007010702 A1 20070111
AI US 2005-171761 A1 20050630 (11)
RLI Continuation-in-part of Ser. No. US 2004-887521, filed on 7 Jul 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-810916, filed on 26 Mar 2004, GRANTED, Pat. No. US 6846985 Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-786198, filed on 25 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2004-780045, filed on 17 Feb 2004, GRANTED, Pat. No. US 7091412 Continuation-in-part of Ser. No. US 2003-747472, filed on 29 Dec 2003, PENDING Continuation-in-part of Ser.

No. US 2003-744543, filed on 22 Dec 2003, ABANDONED Continuation-in-part of Ser. No. US 2003-442420, filed on 21 May 2003, GRANTED, Pat. No. US 6914412 Continuation-in-part of Ser. No. US 2003-409505, filed on 8 Apr 2003, GRANTED, Pat. No. US 6815609
DT Utility
FS APPLICATION
LREP CURATOLO SIDOTI CO., LPA, 24500 CENTER RIDGE ROAD, SUITE 280, CLEVELAND, OH, 44145, US
CLMN Number of Claims: 315
ECL Exemplary Claim: 1
DRWN 54 Drawing Page(s)
LN.CNT 18747
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An assembly that contains a medical device and biological material within which the medical device is disposed. The assembly has a direct or alternating current magnetic susceptibility within the range of from about plus 1+10.sup.-2 centimeter-gram-seconds to about minus 1+10.sup.-2 centimeter-gram-seconds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 12 OF 48 USPATFULL on STN
AN 2006:174046 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2006147492 A1 20060706
AI US 2006-343809 A1 20060131 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
US 2003-526541P 20031203 (60)
US 2003-525226P 20031124 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-518785P 20031110 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN 28 Drawing Page(s)
LN.CNT 56233
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal

tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 13 OF 48 USPATFULL on STN
AN 2006:173926 USPATFULL
TI Water-soluble compound
IN Tuszynski, Jack A., Edmonton, CANADA
Greenwald, Howard J., East Rochester, NY, UNITED STATES
Curry, Stephen H., Rochester, NY, UNITED STATES
Goss, Kendrick, Brighton, MA, UNITED STATES
PI US 2006147371 A1 20060706
AI US 2005-63439 A1 20050223 (11)
RLI Continuation of Ser. No. US 2004-923615, filed on 20 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-878905, filed on 28 Jun 2004, PENDING
PRAI US 2003-516134P 20031031 (60)
DT Utility
FS APPLICATION
LREP Buchanan Ingersoll PC, Burns, Doane, Swecker & Mathis, P.O. Box 1404, Alexandria, VA, 22313-1404, US
CLMN Number of Claims: 83
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 11463
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A water-soluble magnetic anti-mitotic compound with a water-solubility of at least 100 micrograms per milliliter, a molecular weight of at least 150 grams per mole, a mitotic index factor of at least 10 percent, a positive magnetic susceptibility of at least 1,000+10.sup.-6 cgs, and a magnetic moment of at least 0.5 bohr magnetrons, wherein said compound is comprised of at least 7 carbon atoms and at least one inorganic atom with a positive magnetic susceptibility of at least 200+10.sup.-6 cgs.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 14 OF 48 USPATFULL on STN
AN 2006:166501 USPATFULL
TI Methods and apparatus for treatment of aneurysmal tissue
IN Brin, David S., Santa Rosa, CA, UNITED STATES
Tseng, David, Santa Rosa, CA, UNITED STATES
PA Medtronic Vascular, Inc., Santa Rosa, CA, UNITED STATES (U.S. corporation)
PI US 2006141006 A1 20060629
AI US 2006-358653 A1 20060221 (11)
RLI Division of Ser. No. US 2003-423192, filed on 25 Apr 2003, PENDING
DT Utility
FS APPLICATION
LREP MEDTRONIC VASCULAR, INC., IP LEGAL DEPARTMENT, 3576 UNOCAL PLACE, SANTA ROSA, CA, 95403, US
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 823
AB The present invention encompasses methods and apparatus for aiding aneurysm repair.

L18 ANSWER 15 OF 48 USPATFULL on STN
AN 2005:318834 USPATFULL
TI Compositions and methods for treating diverticular disease
IN Hunter, William L., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Avelar, Rui, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005277577 A1 20051215
US 7241736 B2 20070710
AI US 2005-129763 A1 20050512 (11)
RLI Continuation-in-part of Ser. No. US 2004-986230, filed on 10 Nov 2004, PENDING
PRAI US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-518785P 20031110 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 56
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 10081
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Agents, compositions, and implants are provided herein for treating diverticular disease (e.g., diverticulosis and diverticulitis). In particular, fibrosis-inducing agents, hemostatic agents, and/or anti-infective agents, or compositions containing one or more of these agents are provided for use in methods for treating diverticular disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 16 OF 48 USPATFULL on STN
AN 2005:286404 USPATFULL
TI Process for treating a biological organism
IN Tuszynski, Jack A., Edmonton, CANADA
Goss, Kendrick, Brighton, MA, UNITED STATES
Greenwald, Howard J., Rochester, NY, UNITED STATES
Fritz, Garold F., Williamson, NY, UNITED STATES
PI US 2005249667 A1 20051110
AI US 2005-147125 A1 20050607 (11)
RLI Continuation-in-part of Ser. No. US 2005-60868, filed on 18 Feb 2005, PENDING Continuation-in-part of Ser. No. US 2004-923615, filed on 20 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-878905, filed on 28 Jun 2004, PENDING
DT Utility
FS APPLICATION
LREP HOWARD J. GREENWALD P.C., 349 W. COMMERCIAL STREET SUITE 2490, EAST ROCHESTER, NY, 14445-2408, US
CLMN Number of Claims: 103
ECL Exemplary Claim: 1
DRWN 54 Drawing Page(s)
LN.CNT 18060
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A process for treating cells within a biological organism in which sonic energy is focused on cells within a biological organism while the frequency and/or the power level of such energy is varied. In addition there is provided a process for synergistically combining sonic energy and other forms of energy, or other therapeutic agents, in the treatment of cells in living organisms. Furthermore there is provided a process for assaying the efficacy of other therapeutic agents with sonic energy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 17 OF 48 USPATFULL on STN
AN 2005:248564 USPATFULL
TI Biological polymer with differently charged portions
IN Tuszynski, Jack A., Edmonton, CANADA
Goss, Kendrick, Brighton, MA, UNITED STATES
Greenwald, Howard J., Rochester, NY, UNITED STATES
PI US 2005215764 A1 20050929
AI US 2005-60868 A1 20050218 (11)
RLI Continuation-in-part of Ser. No. US 2004-923615, filed on 20 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-878905, filed on 28 Jun 2004, PENDING
DT Utility
FS APPLICATION
LREP HOWARD J. GREENWALD P.C., 349 W. COMMERCIAL STREET SUITE 2490, EAST ROCHESTER, NY, 14445-2408, US
CLMN Number of Claims: 46
ECL Exemplary Claim: 1
DRWN 30 Drawing Page(s)
LN.CNT 15911
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A biological polymer assembly with a biological polymer that contains at least 90 percent of tubulin and a positively charged segment. The positively charged segment has a molecular weight of at least about 5,000 Daltons, a bulk electrical conductivity of at least about 10.sup.-7 ohms.sup.-1 meter.sup.-1 Siemens, a concentration of elemental charges per cubic centimeter of from about 10.sup.12 to about 10.sup.25, and a length of at least about 2 nanometers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 18 OF 48 USPATFULL on STN
AN 2005:220596 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005191331 A1 20050901
AI US 2004-1419 A1 20041130 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-525226P 20031124 (60)
US 2003-526541P 20031203 (60)
US 2004-586861P 20040709 (60)

US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 178
ECL Exemplary Claim: 1-2104
DRWN 28 Drawing Page(s)
LN.CNT 56419
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 19 OF 48 USPATFULL on STN
AN 2005:214571 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005186243 A1 20050825
AI US 2004-97 A1 20041129 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 59
ECL Exemplary Claim: 1-375
DRWN 16 Drawing Page(s)
LN.CNT 12909
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment

of aneurysms and unstable arterial (vulnerable) plaque.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 20 OF 48 USPATFULL on STN
AN 2005:214570 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005186242 A1 20050825
AI US 2004-999204 A1 20041129 (10)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 25
ECL Exemplary Claim: 1-1613
DRWN 22 Drawing Page(s)
LN.CNT 12829
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 21 OF 48 USPATFULL on STN
AN 2005:212065 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND, 6304 (non-U.S. corporation)
PI US 2005183728 A1 20050825
AI US 2004-7836 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-525226P 20031124 (60)

US 2003-526541P 20031203 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 178
ECL Exemplary Claim: 1-3411
DRWN 28 Drawing Page(s)
LN.CNT 56413
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

L18 ANSWER 22 OF 48 USPATFULL on STN
AN 2005:209494 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005181977 A1 20050818
AI US 2004-986231 A1 20041110 (10)
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-525226P 20031124 (60)
US 2003-526541P 20031203 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 182
ECL Exemplary Claim: 1
DRWN 28 Drawing Page(s)
LN.CNT 56396
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic

connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 23 OF 48 USPATFULL on STN
AN 2005:208533 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005181011 A1 20050818
AI US 2004-1792 A1 20041202 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-525226P 20031124 (60)
US 2003-526541P 20031203 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 177
ECL Exemplary Claim: 1-4994
DRWN 28 Drawing Page(s)
LN.CNT 56421
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 24 OF 48 USPATFULL on STN
AN 2005:208530 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA

Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005181008 A1 20050818
AI US 2004-1786 A1 20041202 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-525226P 20031124 (60)
US 2003-526541P 20031203 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 178
ECL Exemplary Claim: 1-4736
DRWN 28 Drawing Page(s)
LN.CNT 56377
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 25 OF 48 USPATFULL on STN
AN 2005:208526 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005181004 A1 20050818
AI US 2004-6289 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE

6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 89
ECL Exemplary Claim: 1-540
DRWN 22 Drawing Page(s)
LN.CNT 12981
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 26 OF 48 USPATFULL on STN
AN 2005:203799 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND, CH (non-U.S. corporation)
PI US 2005177225 A1 20050811
AI US 2004-6895 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
US 2003-526541P 20031203 (60)
US 2003-525226P 20031124 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-518785P 20031110 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 173
ECL Exemplary Claim: 1-11788
DRWN 28 Drawing Page(s)
LN.CNT 56371
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 27 OF 48 USPATFULL on STN
AN 2005:203677 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005177103 A1 20050811
AI US 2004-6314 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 89
ECL Exemplary Claim: 1-705
DRWN 22 Drawing Page(s)
LN.CNT 12990
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 28 OF 48 USPATFULL on STN
AN 2005:202245 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005175663 A1 20050811
AI US 2004-1791 A1 20041202 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-525226P 20031124 (60)
US 2003-526541P 20031203 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 180
ECL Exemplary Claim: 1-3944
DRWN 28 Drawing Page(s)
LN.CNT 56451
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 29 OF 48 USPATFULL on STN
AN 2005:202244 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005175662 A1 20050811
AI US 2004-451 A1 20041129 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 25
ECL Exemplary Claim: 1-1120
DRWN 22 Drawing Page(s)
LN.CNT 12822
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 30 OF 48 USPATFULL on STN
AN 2005:202243 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005175661 A1 20050811
AI US 2004-999205 A1 20041129 (10)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 54
ECL Exemplary Claim: 1-195
DRWN 22 Drawing Page(s)
LN.CNT 12893
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 31 OF 48 USPATFULL on STN
AN 2005:190568 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWEDEN (non-U.S. corporation)
PI US 2005165488 A1 20050728
AI US 2004-6912 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
US 2003-526541P 20031203 (60)
US 2003-525226P 20031124 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-518785P 20031110 (60)
DT Utility

FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 176
ECL Exemplary Claim: 1-3153
DRWN 28 Drawing Page(s)
LN.CNT 56407
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

L18 ANSWER 32 OF 48 USPATFULL on STN
AN 2005:190547 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND, 6304 (non-U.S. corporation)
PI US 2005165467 A1 20050728
AI US 2004-6048 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 111
ECL Exemplary Claim: 1-1241
DRWN 22 Drawing Page(s)
LN.CNT 13096
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

L18 ANSWER 33 OF 48 USPATFULL on STN

AN 2005:178373 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005154454 A1 20050714
AI US 2004-6290 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 111
ECL Exemplary Claim: 1-995
DRWN 22 Drawing Page(s)
LN.CNT 13237
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

L18 ANSWER 34 OF 48 USPATFULL on STN
AN 2005:178372 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005154453 A1 20050714
AI US 2004-461 A1 20041129 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 28

ECL Exemplary Claim: 1-870
DRWN 22 Drawing Page(s)
LN.CNT 12830
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

L18 ANSWER 35 OF 48 USPATFULL on STN
AN 2005:178364 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005154445 A1 20050714
AI US 2004-6266 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 114
ECL Exemplary Claim: 1-1479
DRWN 22 Drawing Page(s)
LN.CNT 13066
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

L18 ANSWER 36 OF 48 USPATFULL on STN
AN 2005:172426 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005149175 A1 20050707

AI US 2004-7719 A1 20041207 (11)
RLI Continuation of Ser. No. US 2004-986450, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-578471P 20040609 (60)
US 2004-586861P 20040709 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 113
ECL Exemplary Claim: 1-1360
DRWN 22 Drawing Page(s)
LN.CNT 13090
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

L18 ANSWER 37 OF 48 USPATFULL on STN
AN 2005:172424 USPATFULL
TI Intravascular devices and fibrosis-inducing agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005149173 A1 20050707
AI US 2004-986450 A1 20041110 (10)
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2004-582833P 20040624 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 49
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 12876
AB Intravascular devices (e.g., stents, stent grafts, covered stents, aneurysm coils, embolic agents and drug delivery catheters and balloons) are used in combination with fibrosing agents in order to induce fibrosis that may otherwise not occur when the implant is placed within an animal or to promote fibrosis betweent the devices and the host tissues. Compositions and methods are described for use in the treatment of aneurysms and unstable arterial (vulnerable) plaque.

L18 ANSWER 38 OF 48 USPATFULL on STN
AN 2005:172409 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005149158 A1 20050707
AI US 2004-409 A1 20041129 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2003-518785P 20031110 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-525226P 20031124 (60)
US 2003-526541P 20031203 (60)
US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 178
ECL Exemplary Claim: 1-274
DRWN 28 Drawing Page(s)
LN.CNT 56404
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 39 OF 48 USPATFULL on STN
AN 2005:172331 USPATFULL
TI Medical implants and anti-scarring agents
IN Hunter, William L., Vancouver, CANADA
Gravett, David M., Vancouver, CANADA
Toleikis, Philip M., Vancouver, CANADA
Maiti, Arpita, Vancouver, CANADA
Signore, Pierre E., Vancouver, CANADA
Liggins, Richard T., Coquitlam, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 2005149080 A1 20050707
AI US 2004-1418 A1 20041130 (11)
RLI Continuation of Ser. No. US 2004-986231, filed on 10 Nov 2004, PENDING
PRAI US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
US 2003-526541P 20031203 (60)

US 2003-525226P 20031124 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-518785P 20031110 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVENYUE, SUITE 6300, SEATTLE, WA, 98104-7092, US
CLMN Number of Claims: 178
ECL Exemplary Claim: 1-806
DRWN 28 Drawing Page(s)
LN.CNT 56418
AB Implants are used in combination with an anti-scarring agent in order to inhibit scarring that may otherwise occur when the implant is placed within an animal. The agent may be any suitable anti-scarring agent, e.g., a cell cycle inhibitor, and may be used in conjunction with a second pharmaceutical agent, e.g., an antibiotic. Suitable implants include intravascular implants, a vascular graft or wrap implant, an implant for hemodialysis access, an implant that provides an anastomotic connection, ventricular assist implant, a prosthetic heart valve implant, an inferior vena cava filter implant, a peritoneal dialysis catheter implant, a central nervous system shunt, an intraocular lens, an implant for glaucoma drainage, a penile implant, an endotracheal tube, a tracheostomy tube, a gastrointestinal device, and a spinal implant.

L18 ANSWER 40 OF 48 USPATFULL on STN
AN 2005:125479 USPATFULL
TI Medical device with multiple coating layers
IN Wang, Xingwu, Wellsville, NY, UNITED STATES
Greenwald, Howard J., Rochester, NY, UNITED STATES
PI US 2005107870 A1 20050519
AI US 2004-923579 A1 20040820 (10)
RLI Continuation-in-part of Ser. No. US 2004-914691, filed on 9 Aug 2004, PENDING Continuation-in-part of Ser. No. US 2004-887521, filed on 7 Jul 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-810916, filed on 26 Mar 2004, GRANTED, Pat. No. US 6846985 Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-786198, filed on 25 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2004-780045, filed on 17 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2003-747472, filed on 29 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-744543, filed on 22 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-442420, filed on 21 May 2003, PENDING Continuation-in-part of Ser. No. US 2003-409505, filed on 8 Apr 2003, GRANTED, Pat. No. US 6815609
DT Utility
FS APPLICATION
LREP HOWARD J. GREENWALD P.C., 349 W. COMMERCIAL STREET SUITE 2490, EAST ROCHESTER, NY, 14445-2408, US
CLMN Number of Claims: 62
ECL Exemplary Claim: 1
DRWN 54 Drawing Page(s)
LN.CNT 18628
AB An implantable medical device that contains two coating layers disposed above at least one of its surfaces. The first coating layer contains a biologically active material; and the second coating layer contains a polymeric material and nanomagnetic material disposed on the first coating layer; the second coating layer is substantially free of the biologically active material. The nanomagentic material has a saturation

magentization of from about 2 to about 3000 electromagnetic units per cubic centimeter, and it contains nanomagnetic particleswith an average particle size of less than about 100 nanometers; the average coherence length between adjacent nanomagnetic particles is less than 100 nanometers.

L18 ANSWER 41 OF 48 USPATFULL on STN
AN 2005:92457 USPATFULL
TI Medical device with low magnetic susceptibility
IN Wang, Xingwu, Wellsville, NY, UNITED STATES
Greenwald, Howard J., Rochester, NY, UNITED STATES
Gunderman, Robert D., Honeyoye Falls, NY, UNITED STATES
PI US 2005079132 A1 20050414
AI US 2004-914691 A1 20040809 (10)
RLI Continuation-in-part of Ser. No. US 2004-887521, filed on 7 Jul 2004, PENDING Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-810916, filed on 26 Mar 2004, GRANTED, Pat. No. US 6846985 Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-786198, filed on 25 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2004-780045, filed on 17 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2003-747472, filed on 29 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-744543, filed on 22 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-442420, filed on 21 May 2003, PENDING Continuation-in-part of Ser. No. US 2003-409505, filed on 8 Apr 2003, GRANTED, Pat. No. US 6815609
DT Utility
FS APPLICATION
LREP HOWARD J. GREENWALD P.C., 349 W. COMMERCIAL STREET SUITE 2490, EAST ROCHESTER, NY, 14445-2408, US
CLMN Number of Claims: 127
ECL Exemplary Claim: 1
DRWN 52 Drawing Page(s)
LN.CNT 17912
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An assembly with a substrate, nanomagnetic material and magetoresistive material. The nanomagnetic material has a saturation magentization of from about 2 to about 3000 electromagnetic units per cubic centimeter; and it contains nanomagnetic particles with an average particle size of less than about 100 nanometers. The average coherence length between adjacent nanomagnetic particles is less than 100 nanometers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 42 OF 48 USPATFULL on STN
AN 2005:62607 USPATFULL
TI Biocompatible materials
IN Ulbricht, Mathias, Berlin, GERMANY, FEDERAL REPUBLIC OF
Thom, Volkmar, Arlington, MA, UNITED STATES
Jankova, Katja, Burgas, BULGARIA
Altankov, George, Sofia, BULGARIA
Jonsson, Gunnar, Vaerloese, DENMARK
PI US 2005053642 A1 20050310
AI US 2003-362677 A1 20030815 (10)
WO 2001-DK557 20010823
PRAI DK 2000-1250 20000823
DT Utility
FS APPLICATION
LREP Browdy and Neimark, Suite 300, 624 Ninth Street NW, Washington, DC, 20001

CLMN Number of Claims: 125
ECL Exemplary Claim: 1
DRWN 31 Drawing Page(s)
LN.CNT 6442
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention teaches a novel approach of creating biocmpatible surfaces, said surfaces being capable of functionally interact with biological material. SAid biocompatible surfaces comrise at least two comonents, such as a hydrophobic substratum and a macromolecule of hydrophilic nature, which, in a cooperativity, form together the novel biocoompatible surfaces. The novel approach is ased on contacting said hydrophobic substratum with a laterally patterned monomolecular layer of said hydrophilic and flexible macromolecules, exhibiting a pronounced excluded volume. The htus formed two component surface is, in respect to polarity and morphology, a molecularly heterogeneous surface. Structural features of said macromolecular monolayer (as e.g. the layer thickness or its lateral density) are determined by: i) the structural features of the layer forming macromolecules (as e.g. their MW or their molecular architecture) and ii) the method of creating said monomolecular layer (as e.g. by physi- or chemisorbing, or by chemically binding said macromolecules). The structural features of the layer forming macromolecules(s) is in turn determined by synthesis. AMount and conformation and thus also biological activity of biological material (as e.g. polypeptides) which contact the novel biocompatible surface, is determined and maintained by the cooperative action of the underlying hydrophobic substratum and the macromolecular layer. In this way it becomes possible to maintain and control biological interactions between said contacted polypeptides and other biological compounds as e.g. cells, antibodies and the like. Consequently, the present invention aims to reduce and/or eliminate the deactivation and/or denaturation associated with the contacting of polypeptides and/or other biological material to a hydrophobic substratum surface.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 43 OF 48 USPATFULL on STN
AN 2005:30367 USPATFULL
TI Medical device with low magnetic susceptibility
IN Wang, Xingwu, Wellsville, NY, UNITED STATES
Greenwald, Howard Jay, Rochester, NY, UNITED STATES
PI US 2005025797 A1 20050203
AI US 2004-887521 A1 20040707 (10)
RLI Continuation-in-part of Ser. No. US 2004-867517, filed on 14 Jun 2004, PENDING Continuation-in-part of Ser. No. US 2004-810916, filed on 26 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-786198, filed on 25 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2004-780045, filed on 17 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2003-747472, filed on 29 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-744543, filed on 22 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-442420, filed on 21 May 2003, PENDING Continuation-in-part of Ser. No. US 2003-409505, filed on 8 Apr 2003, GRANTED, Pat. No. US 6815609
DT Utility
FS APPLICATION
LREP HOWARD J. GREENWALD P.C., 349 W. COMMERCIAL STREET SUITE 2490, EAST ROCHESTER, NY, 14445-2408
CLMN Number of Claims: 137
ECL Exemplary Claim: 1
DRWN 42 Drawing Page(s)
LN.CNT 17461

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An assembly that contains a medical device and biological material within which the medical device is disposed. The assembly has a magnetic susceptibility within the range of plus or minus 1+10.sup.-3 centimeter-gram-seconds

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 44 OF 48 USPATFULL on STN
AN 2004:321764 USPATFULL
TI Therapeutic assembly
IN Wang, Xingwu, Wellsville, NY, UNITED STATES
Greenwald, Howard J., Rochester, NY, UNITED STATES
Lanzafame, John, Victor, NY, UNITED STATES
Weiner, Michael L., Webster, NY, UNITED STATES
Connelly, Patrick R., Rochester, NY, UNITED STATES
PI US 2004254419 A1 20041216
AI US 2004-867517 A1 20040614 (10)
RLI Continuation-in-part of Ser. No. US 2004-810916, filed on 26 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-808618, filed on 24 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2004-786198, filed on 25 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2004-780045, filed on 17 Feb 2004, PENDING Continuation-in-part of Ser. No. US 2003-747472, filed on 29 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-744543, filed on 22 Dec 2003, PENDING Continuation-in-part of Ser. No. US 2003-409505, filed on 8 Apr 2003, PENDING Continuation-in-part of Ser. No. US 2003-442420, filed on 21 May 2003, PENDING
DT Utility
FS APPLICATION
LREP HOWARD J. GREENWALD P.C., 349 W. COMMERCIAL STREET SUITE 2490, EAST ROCHESTER, NY, 14445-2408
CLMN Number of Claims: 175
ECL Exemplary Claim: CLM-1-177
DRWN 40 Drawing Page(s)
LN.CNT 16208
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A therapeutic assembly that contains a therapeutic agent, a ctyotoxic radioactive material, and a nanomagnetic material with nanomagnetic particles. The nanomagentic particles have an average particle size of less than about 100 nanometers; and the average coherence length between adjacent nanomagnetic particles is less than 100 nanometers. The nanomagnetic material has a saturation magentization of from about 2 to about 3000 electromagnetic units per cubic centimeter, a phase transition temperature of from about 40 to about 200 degrees Celsius, and a saturation magnetization of from about 2 to about 3,000 electromagnetic units per cubic centimeter

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 45 OF 48 USPATFULL on STN
AN 2004:274830 USPATFULL
TI Methods and apparatus for treatment of aneurysmal tissue
IN Brin, David S., Santa Rosa, CA, UNITED STATES
Tseng, David, Santa Rosa, CA, UNITED STATES
PI US 2004215335 A1 20041028
AI US 2003-423192 A1 20030425 (10)
DT Utility
FS APPLICATION
LREP MEDTRONIC VASCULAR, INC., IP LEGAL DEPARTMENT, 3576 UNOCAL PLACE, SANTA ROSA, CA, 95403

CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 855
AB The present invention encompasses methods and apparatus for aiding aneurysm repair.

L18 ANSWER 46 OF 48 USPATFULL on STN
AN 2003:270829 USPATFULL
TI Process for producing information recording material and coating solutions for use therein
IN Yokota, Yasuro, Tokyo, JAPAN
Shiraishi, Masato, Tokyo, JAPAN
PI US 2003190432 A1 20031009
US 6746718 B2 20040608
AI US 2002-265911 A1 20021008 (10)
RLI Continuation of Ser. No. WO 2001-JP2497, filed on 27 Mar 2001, UNKNOWN
PRAI JP 2000-109769 20000411
JP 2000-354743 20001121
JP 2000-388227 20001221
DT Utility
FS APPLICATION
LREP NIXON & VANDERHYE P.C., 1100 North Glebe Road, 8th Floor, Arlington, VA, 22201
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 3223
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Concerning a process for producing an information recording material having an information recording layer formed on a substrate, there are disclosed (1) a method of curtain-coating a coating composition film comprising two coating solution films of which the viscosity increases when the two coating solution films are brought into contact, or mixed, with each other and an intermediate coating solution film that is for isolating said two coating solution films one from the other and is provided between said two coating solution films, (2) a method of curtain-coating a coating composition film comprising at least one set of adjacent two layers of which the viscosity increases with the passage of time when the two layers are brought into contact, or mixed, with each other, (3) a method of applying water or an aqueous solution to a substrate surface and curtain-coating the substrate in a non-dry state with a coating composition film made of a plurality of layers, and (4) a method of curtain-coating a coating composition film having, as a lowermost layer, a coating solution having a water content of at least 90 % by weight.

According to the method of the present invention, there can be produced an information recording material particularly excellent in quality of applied layers and excellent in various properties with good productivity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 47 OF 48 USPAT2 on STN
AN 2005:318834 USPAT2
TI Compositions and methods for treating diverticular disease
IN Hunter, William L, Vancouver, CANADA
Toleikis, Philip M, Vancouver, CANADA
Gravett, David M, Vancouver, CANADA

Avelar, Rui, Vancouver, CANADA
Guan, Dechi, Vancouver, CANADA
PA Angiotech International AG, Zug, SWITZERLAND (non-U.S. corporation)
PI US 7241736 B2 20070710
AI US 2005-129763 20050512 (11)
RLI Continuation-in-part of Ser. No. US 2004-986230, filed on 10 Nov 2004, PENDING
PRAI US 2004-586861P 20040709 (60)
US 2004-578471P 20040609 (60)
US 2003-523908P 20031120 (60)
US 2003-524023P 20031120 (60)
US 2003-518785P 20031110 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Monshipouri, Maryam; Assistant Examiner: Tsay, Marsha
LREP Seed IP Law Group PLLC
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN 15 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 18529
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Agents, compositions, and implants are provided herein for treating diverticular disease (e.g., diverticulosis and diverticulitis). In particular, fibrosis-inducing agents, hemostatic agents, and/or anti-infective agents, or compositions containing one or more of these agents are provided for use in methods for treating diverticular disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L18 ANSWER 48 OF 48 USPAT2 on STN
AN 2003:270829 USPAT2
TI Process of curtain for producing an information recording material
IN Yokota, Yasuro, Tokyo, JAPAN
PA Mitsubishi Paper Mills Ltd., Tokyo, JAPAN (non-U.S. corporation)
PI US 6746718 B2 20040608
AI US 2002-265911 20021008 (10)
RLI Continuation of Ser. No. WO 2001-JP2497, filed on 27 Mar 2001
PRAI JP 2000-109769 20000411
JP 2000-354743 20001121
JP 2000-388227 20001221
DT Utility
FS GRANTED
EXNAM Primary Examiner: Bareford, Katherine A.
LREP Nixon & Vanderhye P.C.
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 2942
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An information recording material having an information recording layer formed on a substrate formed by applying by curtain-coating a coating film comprising two coating solution films of which the viscosity increases when the two coating solution films are brought into contact, or mixed, with each other. An intermediate coating solution film for isolating the two coating solution films one from the other and is provided between the two coating solution films. Alternatively, a curtain-coating composition film having at least one set of adjacent two layers of which the viscosity increases with the passage of time when the two layers are brought into contact, or mixed, with each other. Information recording materials having particularly excellent quality of

applied layers and excellent in various properties with good productivity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s chitooligo?
L19 2691 CHITOOLIGO?

=> s l19 and (Da or Dalton)
L20 136 L19 AND (DA OR DALTON)

=> s l20 and degree
L21 89 L20 AND DEGREE

=> s l21 and (method or process)
6 FILES SEARCHED...
12 FILES SEARCHED...
24 FILES SEARCHED...
L22 58 L21 AND (METHOD OR PROCESS)

=> dis l22 1-58 bib abs

L22 ANSWER 1 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:909274 CAPLUS
DN 145:342198
TI Process for preparing heparolysate injection
IN Wang, Wei
PA Pharmaceutical Factory, Baiqiuen Medical University, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 6pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1824287	A	20060830	CN 2005-10119094	20051221
PRAI CN 2005-10119094		20051221		

AB The process comprises preparing bovine or porcine liver, removing connective tissue, mixing with injection water a ratio of 0.8-0.82:1, homogenizing, heating to 50-51.degree., adjusting pH to 7.0-7.5 with NaOH, adding pancreatin, hydrolyzing at 50-51.degree. for 1-1.5 h, adding A.T.3942 proteinase at 1 g/L, further hydrolyzing for 4 h, adjusting pH to 5.8-6.0 with phosphoric acid, adding activated C at 1 g/L, heating till boiling, standing for 30 min, centrifuging at 3000 rpm for 30 min, mixing supernatant with chitooligosaccharide, filtrating to remove precipitate, adjusting pH to 7.2 with NaOH, filtrating with microporous membrane, ultrafiltering using filter membrane with cut-off of 10,000 Da to obtain heparolyzate solution, adding cystine as protectant, diluting with injection water, sterilizing at 121.degree. for 30 min, checking to obtain the heparolyzate injection. The process gave heparolyzate with high quality for treating hepatitis and cirrhosis.

L22 ANSWER 2 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:197068 CAPLUS
DN 144:463249
TI Acetyl xylan esterase-catalyzed deacetylation of chitin and chitosan
AU Morley, Krista L.; Chauve, Gregory; Kazlauskas, Romas; Dupont, Claude; Shareck, Francois; Marchessault, Robert H.
CS Department of Chemistry, McGill University, Montreal, QC, H3A 2K6, Can.
SO Carbohydrate Polymers (2006), 63(3), 310-315

CODEN: CAPOD8; ISSN: 0144-8617
PB Elsevier B.V.
DT Journal
LA English
AB Acetyl xylan esterase catalyzes the hydrolysis of N-acetyl groups in chitinous materials of variable ds.p. and acetylation. The influence of substrate accessibility is most notable with substrate of high degree of acetylation (DA). The activity rises sharply as the number of acetyl groups in the substrates decreases and at about 24% DA enzyme activity reaches a maximum Therefore, based on a multiple-attack mechanism we hypothesize that this maximum represents the ideal acetate microstructure for optimal activity of this enzyme. The enzyme partially deacetylates chitin oligomers DP 2-6 with a plateau in deacetylation observed at DP5. These results show that oligomer length is important for enzyme action. By combining successive alkaline and enzymic deacetylation a process improvement for production of chitosan is suggested.
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 3 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:828557 CAPLUS
DN 142:169542
TI Anticoagulant activity of heterochitosans and their oligosaccharide sulfates
AU Park, Pyo-Jam; Je, Jae-Young; Jung, Won-Kyo; Ahn, Chang-Bum; Kim, Se-Kwon
CS Department of Chemistry, Pukyong National University, Pusan, 608-737, S. Korea
SO Eur. Food Res. Technol. (2004), 219(5), 529-533
CODEN: EFRTFO; ISSN: 1438-2377
PB Springer GmbH
DT Journal
LA English
AB Three kinds of partially deacetylated heterochitosans (90, 75, and 50% deacetylated) were prepared from crab chitin by N-deacetylation with 40% sodium hydroxide solution for different durations. Nine kinds of heterochitooligosaccharides (hetero-COSs) with relatively high mol. wts. (5,000-10,000 Da; 90-HMWCOSs, 75-HMWCOSs, and 50-HMWCOSs), medium mol. wts. (1,000-5,000 Da; 90-MMWCOSs, 75-MMWCOSs, and 50-MMWCOSs), and low mol. wts. (below 1,000 Da; 90-LMWCOSs, 75-LMWCOSs, and 50-LMWCOSs) were prepared using an ultrafiltration membrane reactor system. In addition, their sulfated derivs. were prepared by a method using a trimethylaminesulfur trioxide, and the anticoagulant properties of the heterochitosans and their COS sulfates with different chain lengths and degrees of deacetylation were investigated. Clotting times in thrombin-time assay were prolonged in the presence of various concns. of the heterochitosans and their COS sulfates using normal human plasma. The 90%-deacetylated chitosan sulfate exhibited the highest anticoagulant activity among all the heterochitosans and their COS sulfates.
RE.CNT 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 4 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:553428 CAPLUS
DN 139:227154
TI Effects of chitin and chitosan derivatives on control of pathogenic fungi
AU Park, Ro-Dong; Jo, Kyu-Jong; Jo, You-Young; Jin, Yu-Lan; Kim, Kil-Yong; Shim, Jae-Han; Kim, Yong-Woong
CS Department of Agricultural Chemistry and Institute of Agricultural Science and Technology, Chonnam National University, Gwangju, 500-757, S. Korea

SO Advances in Chitin Science (2002), 5, 255-259
CODEN: ACSCFF
PB National Metal and Materials Technology Center
DT Journal
LA English
AB Chitosan solubilized in acetic acid showed much higher and more consistent antifungal activity compared with the chitosan solubilized in HCl. The antifungal activity was not significantly affected with the DA (degree of deacetylation) range of 57.3-99.2% but much higher than that of chitin. Regarding the effect of water-soluble and low mol. weight chitosan (DA 57.3%) against 6 plant pathogens, Monosporascus canonballus and Pythium irregulare were the most susceptible to the chitosan, and Fusarium oxysporum and F. graminearum were the most resistant. At the concentration of 2.5 mg/mL, the growth of most pathogens except F. oxysporum were almost completely inhibited. The values of MIC50 were dependent on both DA of chitosan and plant pathogens. Chitosan of DA 57.3% showed the lowest MIC50 ranging <0.1-1.8 mg/mL and that of DA 84.7% showed the highest MIC50 ranging <0.4-4.0 mg/mL depending on the pathogens. The conjugates of chitooligosaccharides (COS) with amino acids were also synthesized and their antifungal activity was compared with those of chitosan. COS-Gln and COS-Asn exhibited strong antifungal activity and their MIC50 values were much lower than those of the chitosan with DA 57.3%. These results suggest that the antifungal effect of chitosan is related to the solubilization method, degree of deacetylation, mol. modification, and fungal species.
RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L22 ANSWER 5 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1998:371765 CAPLUS
DN 129:16297
TI Preparation of higher N-acetylchitooligosaccharides in high yields
AU Aiba, Sei-ichi; Muraki, Einosuke
CS Dep. Organic Materials, Osaka National Research Inst., Ikeda, 563-8577, Japan
SO Kichin, Kitosan Kenkyu (1998), 4(2), 124-125
CODEN: KKKEFB; ISSN: 1340-9778
PB Nippon Kichin, Kitosan Gakkai
DT Journal
LA Japanese
AB The purpose of this study is to develop the method for preparing N-acetylchitooligosaccharides [(GlcNAc)n] with high d.p. (d.p.) by enzymic and chemical reactions. Chitosans with various degrees of N-acetylation (DA) were hydrolyzed by enzymes and hydrolyzates were acetylated with acetic anhydride. (GlcNAc)n (n=1.apprx.7) were detected by HPLC. The yield of hexaose was more than 20% when using lipase, cellulase, and hemicellulase prepns. The mixture (55 mg) of pentamer (11%), hexamer (69%), and heptamer (18%) was obtained by selective precipitation from aqueous solution by adding methanol, starting from chitosan (200 mg) with DA of 22%. The hydrolysis of chitosans with DA of 10.apprx.30% by these enzymes followed by N-acetylation is suitable to prepare higher (GlcNAc)n.

L22 ANSWER 6 OF 58 CAPLUS COPYRIGHT 2008 ACS on STN
AN 1996:276751 CAPLUS
DN 125:33973
TI Preparation of N-acetylchitooligosaccharides by hydrolysis of chitosan with enzymes followed by N-acetylation
AU Aiba, Sei-ichi; Muraki, Einosuke

CS Functional Polymer Section, Osaka National Research Institute, Osaka, 563, Japan
SO Advances in Chitin Science (1996), 1, 192-197
CODEN: ACSCFF
PB Jacques Andre
DT Journal
LA English
AB The purpose of this study is to develop the method for preparing N-acetylchitooligosaccharides [(GlcNAc)n] with high d.p. by enzymic and chemical reactions. Chitosans with various degrees of N-acetylation (DA) were hydrolyzed by enzymes and hydrolyzates were acetylated with acetic anhydride. (GlcNAc)n (n=1.apprx.7) were detected in the reaction mixts. by HPLC. The yield of (GlcNAc)6 was more than 20% when using lipase, cellulase, and hemicellulase prepns. The mixture of pentamer (13%), hexamer (72%), and heptamer (15%) was obtained by selective precipitation from aqueous solution by adding methanol. The yield was 51mg from chitosan (200mg) with a DA of 22%. The hydrolysis of chitosans with DA of 10.apprx.30% by these enzymes followed by N-acetylation is more suitable to prepare higher (GlcNAc)n.

L22 ANSWER 7 OF 58 SCISEARCH COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 2004:939569 SCISEARCH
GA The Genuine Article (R) Number: 864DI
TI Anticoagulant activity of heterochitosans and their oligosaccharide sulfates
AU Park P J; Je J Y; Jung W K; Ahn C B; Kim S K (Reprint)
CS Pukyong Natl Univ, Dept Chem, Pusan 608737, South Korea (Reprint); Yosu Natl Univ, Dept Food Sci & Nutr, Yosu 550749, South Korea
sknkim@mail.pknu.ac.kr
CYA South Korea
SO EUROPEAN FOOD RESEARCH AND TECHNOLOGY, (OCT 2004) Vol. 219, No. 5, pp. 529-533.
ISSN: 1438-2377.
PB SPRINGER, 233 SPRING STREET, NEW YORK, NY 10013 USA.
DT Article; Journal
LA English
REC Reference Count: 35
ED Entered STN: 18 Nov 2004
Last Updated on STN: 18 Nov 2004
ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS
AB Three kinds of partially deacetylated heterochitosans, 90% deacetylated chitosan, 75% deacetylated chitosan and 50% deacetylated chitosan, were prepared from crab chitin by N-deacetylation with 40% sodium hydroxide solution for different durations. Nine kinds of heterochitooligosaccharides (hetero-COSs) with relatively high molecular weights (5,000-10,000 Da; 90-HMWCOSs, 75-HMWCOSs, and 50-HMWCOSs), medium molecular weights (1,000-5,000 Da; 90-MMWCOSs, 75-MMWCOSs, and 50-MMWCOSs), and low molecular weights (below 1,000 Da; 90-LMWCOSs, 75-LMWCOSs, and 50-LMWCOSs) were prepared using an ultrafiltration membrane reactor system, respectively. In addition, their sulfated derivatives were prepared by a method using a trimethylamine-sulfur trioxide, and the anticoagulant properties of the heterochitosans and their COS sulfates with different chain lengths and degrees of deacetylation were investigated. Clotting times in thrombin-time assay were prolonged in the presence of various concentrations of the heterochitosans and their COS sulfates using normal human plasma. The 90% deacetylated chitosan sulfate exhibited the highest anticoagulant activity among all the heterochitosans and their COS sulfates.

L22 ANSWER 8 OF 58 USPATFULL on STN
AN 2008:92781 USPATFULL
TI NOVEL ANTIGEN-BINDING POLYPEPTIDES AND THEIR USES
IN CHO, Ho Sung, San Diego, CA, UNITED STATES
DANIEL, Thomas O., La Jolla, CA, UNITED STATES
WILSON, Troy E., San Marino, CA, UNITED STATES
CUJEC, Thomas P., San Diego, CA, UNITED STATES
TIAN, Feng, San Diego, CA, UNITED STATES
HAYS, Anna-Maria, San Diego, CA, UNITED STATES
KIMMEL, Bruce E., San Diego, CA, UNITED STATES
HO, Lillian, San Diego, CA, UNITED STATES
PA AMBRX, INC., La Jolla, CA, UNITED STATES, 92037 (U.S. corporation)
PI US 2008081038 A1 20080403
AI US 2007-873372 A1 20071016 (11)
RLI Continuation of Ser. No. US 2005-155909, filed on 17 Jun 2005, PENDING
PRAI US 2005-654018P 20050217 (60)
US 2005-648222P 20050128 (60)
US 2004-581334P 20040618 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10975 NORTH TORREY PINES ROAD, SUITE 100, LA JOLLA, CA, 92037, US
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 9785
AB Novel antigen-binding polypeptides (ABP) and uses thereof are provided.

L22 ANSWER 9 OF 58 USPATFULL on STN
AN 2008:65179 USPATFULL
TI LysM Receptor-Like Kinases To Improve Plant Defense Response Against Fungal Pathogens
IN Wan, Jinrong, Columbia, MO, UNITED STATES
Stacey, Gary, Columbia, MO, UNITED STATES
Stacey, Minviluz, Columbia, MO, UNITED STATES
Zhang, Xuecheng, Columbia, MO, UNITED STATES
PA UNIVERSITY OF MISSOURI BOARD OF CURATORS, Columbia, MO, UNITED STATES, 65211 (U.S. corporation)
PI US 2008057093 A1 20080306
AI US 2007-835328 A1 20070807 (11)
PRAI US 2006-836084P 20060807 (60)
DT Utility
FS APPLICATION
LREP LATHROP & GAGE LC, 4845 PEARL EAST CIRCLE, SUITE 300, BOULDER, CO, 80301, US
CLMN Number of Claims: 34
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 7838
AB Perception of chitin fragments (chitooligosaccharides) is an important first step in plant defense response against fungal pathogen. LysM receptor-like kinases (LysM RLKs) are instrumental in this perception process. LysM RLKs also play a role in activating transcription of chitin-responsive genes (CRGs) in plants. Mutations in the LysM kinase receptor genes or the downstream CRGs may affect the fungal susceptibility of a plant. Mutations in LysM RLKs or transgenes carrying the same may be beneficial in imparting resistance against fungal pathogens.

L22 ANSWER 10 OF 58 USPATFULL on STN
AN 2008:57936 USPATFULL
TI Methods for Expression and Purification of Recombinant Human Growth Hormone
IN BUECHLER, Ying, Carlsbad, CA, UNITED STATES
LIEU, Ricky, San Diego, CA, UNITED STATES
ONG, Michael, San Diego, CA, UNITED STATES
BUSSELL, Stuart, Carlsbad, CA, UNITED STATES
KNUDSEN, Nick, San Diego, CA, UNITED STATES
CHO, Ho Sung, San Diego, CA, UNITED STATES
PA AMBRX, INC., La Jolla, CA, UNITED STATES, 92037 (U.S. corporation)
PI US 2008050777 A1 20080228
AI US 2007-874086 A1 20071017 (11)
RLI Continuation of Ser. No. US 2005-315752, filed on 21 Dec 2005, PENDING
PRAI US 2005-727968P 20051017 (60)
US 2005-680977P 20050513 (60)
US 2005-655744P 20050223 (60)
US 2004-638616P 20041222 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10975 NORTH TORREY PINES ROAD, SUITE 100, LA JOLLA, CA, 92037, US
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 8303
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to the production, purification, and isolation of human growth hormone (hGH). More particularly, the invention relates to the production, purification, and isolation of substantially purified hGH from recombinant host cells or culture medium including, for example, yeast, insect, mammalian and bacterial host cells. The process of the present invention is also useful for purification of hGH linked to polymers or other molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 11 OF 58 USPATFULL on STN
AN 2008:57533 USPATFULL
TI NOVEL ANTIGEN-BINDING POLYPEPTIDES AND THEIR USES
IN CHO, Ho Sung, San Diego, CA, UNITED STATES
DANIEL, Thomas O., La Jolla, CA, UNITED STATES
WILSON, Troy E., San Marino, CA, UNITED STATES
CUJEC, Thomas P., San Diego, CA, UNITED STATES
TIAN, Feng, San Diego, CA, UNITED STATES
HAYS, Anna-Maria, San Diego, CA, UNITED STATES
KIMMEL, Bruce E., San Diego, CA, UNITED STATES
HO, Lillian, San Diego, CA, UNITED STATES
PA AMBRX, INC., La Jolla, CA, UNITED STATES, 92037 (U.S. corporation)
PI US 2008050374 A1 20080228
AI US 2007-873255 A1 20071016 (11)
RLI Continuation of Ser. No. US 2005-155909, filed on 17 Jun 2005, PENDING
PRAI US 2005-654018P 20050217 (60)
US 2005-648222P 20050128 (60)
US 2004-581334P 20040618 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10975 NORTH TORREY PINES ROAD, SUITE 100, LA JOLLA, CA, 92037, US
CLMN Number of Claims: 23

ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 9784
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel antigen-binding polypeptides (ABP) and uses thereof are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 12 OF 58 USPATFULL on STN
AN 2008:39013 USPATFULL
TI Annotated Plant Genes
IN Cheikh, Nordine, 16534 Baxter Forest Ridge, Chesterfield, MO, UNITED STATES 63005
Liu, Jingdong, 2200 Sycamore Drive, Chesterfield, MO, UNITED STATES 63017
PI US 2008034453 A1 20080207
AI US 1999-371146 A1 19990809 (9)
RLI Continuation-in-part of Ser. No. US 1999-9304517, filed on 6 May 1999, abandoned
DT Utility
FS APPLICATION
LREP ARNOLD & PORTER, LLP, 555 TWELFTH STREET, N.W., ATTN: IP DOCKETING, WASHINGTON, DC, 20004, UNITED STATES
CLMN Number of Claims: 10
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 16595
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is in the field of plant biochemistry. More specifically the invention relates to nucleic acid sequences from plant cells, in particular, nucleic acid sequences from maize and soybean. The invention encompasses nucleic acid molecules that encode proteins and fragments of proteins. In addition, the invention also encompasses proteins and fragments of proteins so encoded and antibodies capable of binding these proteins or fragments. The invention also relates to methods of using the nucleic acid molecules, proteins and fragments of proteins, and antibodies, for example for genome mapping, gene identification and analysis, plant breeding, preparation of constructs for use in plant gene expression, and transgenic plants.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 13 OF 58 USPATFULL on STN
AN 2007:328684 USPATFULL
TI Carohydrate-Ligand Conjugates and Their Application for the Analysis of Carbohydrate-Protein Interaction
IN Suda, Yasuo, Kagoshima, JAPAN
PA JAPAN SCIENCE AND TECHNOLOGY AGENCY, Saitama, JAPAN, 332-0012 (non-U.S. corporation)
NATIONAL UNIVERSITY CORPORATION KAGOSHIMA UNIVERSITY, Kagoshima, JAPAN, 890-8580 (non-U.S. corporation)
PI US 2007287195 A1 20071213
AI US 2005-590045 A1 20050218 (10)
WO 2005-JP3220 20050218
20070717 PCT 371 date
PRAI JP 2004-41994 20040218
DT Utility
FS APPLICATION
LREP MORRISON & FOERSTER LLP, 425 MARKET STREET, SAN FRANCISCO, CA, 94105-2482, US
CLMN Number of Claims: 10

ECL Exemplary Claim: 1
DRWN 23 Drawing Page(s)
LN.CNT 2143
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A novel ligand conjugate which is effectively utilizable for analyzing a function of a protein; a ligand-supporting object; and a method of analyzing a protein. The ligand conjugate has a structure which comprises: a linker compound having a structure represented by the following General Formula (1): ##STR1## (wherein n and p each is an integer of 0 to 6) in which X is a structure comprising one, two, or three hydrocarbon derivative chains which have an aromatic amino group at the end and may have a carbon-nitrogen bond in the main chain, Y is a hydro-carbon structure containing one or more sulfur atoms, and Z is a straight-chain structure comprising a carbon-carbon bond or carbon-oxygen bond; and a sugar which has a reducing end and is bonded to the linker compound through the aromatic amino group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 14 OF 58 USPATFULL on STN
AN 2007:147607 USPATFULL
TI Targeted glycosaminoglycan polymers by polymer grafting and methods of making and using the same
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
Jing, Wei, Edmond, OK, UNITED STATES
PI US 2007128703 A1 20070607
AI US 2007-651379 A1 20070109 (11)
RLI Continuation of Ser. No. US 2003-642248, filed on 15 Aug 2003, PENDING Continuation-in-part of Ser. No. US 2002-195908, filed on 15 Jul 2002, ABANDONED Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser. No. US 2001-842484, filed on 25 Apr 2001, ABANDONED Continuation-in-part of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING
PRAI US 2002-404356P 20020816 (60)
US 2003-479432P 20030618 (60)
US 2003-491362P 20030731 (60)
US 1998-107929P 19981111 (60)
US 1998-80414P 19980402 (60)
US 2000-199538P 20000425 (60)
US 2001-289554P 20010508 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 30
ECL Exemplary Claim: 1
DRWN 41 Drawing Page(s)
LN.CNT 7926
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate or chondroitin or heparin/heparosan synthases from Pasteurella, in order to create a variety of glycosaminoglycan oligosaccharides having a natural or chimeric or hybrid sugar structure with a targeted size that are substantially monodisperse in size.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 15 OF 58 USPATFULL on STN

AN 2007:134507 USPATFULL
TI Natural, chimeric and hybrid glycosaminoglycan polymers and methods making and using same
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
Jing, Wei, Edmond, OK, UNITED STATES
PI US 2007117188 A1 20070524
AI US 2007-698311 A1 20070125 (11)
RLI Continuation of Ser. No. US 2002-195908, filed on 15 Jul 2002, ABANDONED Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser. No. US 2001-842484, filed on 25 Apr 2001, ABANDONED Continuation-in-part of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING
PRAI US 2001-305263P 20010713 (60)
US 1998-107929P 19981111 (60)
US 1998-80414P 19980402 (60)
US 2000-199538P 20000425 (60)
US 2001-289554P 20010508 (60)
US 2002-350642P 20020122 (60)
US 2001-345497P 20011109 (60)
US 2002-391787P 20020620 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 35 Drawing Page(s)
LN.CNT 9150
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate or chondroitin or heparin/heparosan synthases from Pasteurella multocida, in order to create a variety of glycosaminoglycan oligosaccharides having a natural or chimeric or hybrid sugar structure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 16 OF 58 USPATFULL on STN
AN 2007:134503 USPATFULL
TI In vivo incorporation of unnatural amino acids
IN Schultz, Peter, La Jolla, CA, UNITED STATES
Wang, Lei, San Diego, CA, UNITED STATES
Anderson, John Christopher, San Diego, CA, UNITED STATES
Chin, Jason William, Cambridge, UNITED KINGDOM
Liu, David R., Lexington, MA, UNITED STATES
Magliery, Thomas J., North Haven, CT, UNITED STATES
Meggers, Eric L., Philadelphia, PA, UNITED STATES
Mehl, Ryan A., Lancaster, PA, UNITED STATES
Pastrnak, Miro, San Diego, CA, UNITED STATES
Santoro, Stephen William, Cambridge, MA, UNITED STATES
Zhang, Zhiwen, San Diego, CA, UNITED STATES
PA The Scripps Research Institute (U.S. corporation)
The Regents of the University of California (U.S. corporation)
PI US 2007117184 A1 20070524
AI US 2006-583551 A1 20061018 (11)
RLI Continuation of Ser. No. US 2004-17550, filed on 17 Dec 2004, PENDING Continuation of Ser. No. US 2002-126927, filed on 19 Apr 2002, GRANTED, Pat. No. US 7045337
PRAI US 2001-285030P 20010419 (60)
US 2002-355514P 20020206 (60)

DT Utility
FS APPLICATION
LREP QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501, US
CLMN Number of Claims: 12
ECL Exemplary Claim: 1-140
DRWN 37 Drawing Page(s)
LN.CNT 8634
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for in vivo incorporation of unnatural amino acids. Also provided are compositions including proteins with unnatural amino acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 17 OF 58 USPATFULL on STN
AN 2006:273950 USPATFULL
TI In vivo incorporation of unnatural amino acids
IN Shultz, Peter, La Jolla, CA, UNITED STATES
Wang, Lei, San Diego, CA, UNITED STATES
Anderson, John Christopher, San Diego, CA, UNITED STATES
Chin, Jason William, Cambridge, UNITED KINGDOM
Liu, David R., Lexington, MA, UNITED STATES
Magliery, Thomas J., North Haven, CT, UNITED STATES
Meggers, Eric L., Philadelphia, PA, UNITED STATES
Mehl, Ryan A., Lancaster, PA, UNITED STATES
Pastmark, Miro, San Diego, CA, UNITED STATES
Santoro, Steven William, Cambridge, MA, UNITED STATES
Zhang, Zhiwen, San Diego, CA, UNITED STATES
PA The Scripps Research Institute (U.S. corporation)
The Regents of University of California (U.S. corporation)
PI US 2006233744 A1 20061019
AI US 2005-254161 A1 20051018 (11)
RLI Continuation of Ser. No. US 2002-126927, filed on 19 Apr 2002, GRANTED, Pat. No. US 7045337
PRAI US 2001-285030P 20010419 (60)
US 2002-355514P 20020206 (60)
DT Utility
FS APPLICATION
LREP QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501, US
CLMN Number of Claims: 5
ECL Exemplary Claim: 1-140
DRWN 37 Drawing Page(s)
LN.CNT 8680
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for in vivo incorporation of unnatural amino acids. Also provided are compositions including proteins with unnatural amino acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 18 OF 58 USPATFULL on STN
AN 2006:255076 USPATFULL
TI Compositions containing, methods involving, and uses of non-natural amino acids and polypeptides
IN Miao, Zhenwei, San Diego, CA, UNITED STATES
Liu, Junjie, San Diego, CA, UNITED STATES
Norman, Thea, San Diego, CA, UNITED STATES
Driver, Russell, Solana Beach, CA, UNITED STATES
PA Ambrx, Inc., La Jolla, CA, UNITED STATES (U.S. corporation)

PI US 2006217532 A1 20060928
AI US 2005-313956 A1 20051221 (11)
PRAI US 2004-638418P 20041222 (60)
US 2004-638527P 20041222 (60)
US 2004-639195P 20041222 (60)
US 2005-696210P 20050701 (60)
US 2005-696302P 20050701 (60)
US 2005-696068P 20050701 (60)
DT Utility
FS APPLICATION
LREP WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 94304-1050, US
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 65 Drawing Page(s)
LN.CNT 14302
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed herein are non-natural amino acids and polypeptides that include at least one non-natural amino acid, and methods for making such non-natural amino acids and polypeptides. The non-natural amino acids, by themselves or as a part of a polypeptide, can include a wide range of possible functionalities, but typical have at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Also disclosed herein are non-natural amino acid polypeptides that are further modified post-translationally, methods for effecting such modifications, and methods for purifying such polypeptides. Typically, the modified non-natural amino acid polypeptides include at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Further disclosed are methods for using such non-natural amino acid polypeptides and modified non-natural amino acid polypeptides, including therapeutic, diagnostic, and other biotechnology uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 19 OF 58 USPATFULL on STN
AN 2006:254833 USPATFULL
TI Compositions containing, methods involving, and uses of non-natural amino acids and polypeptides
IN Miao, Zhenwei, San Diego, CA, UNITED STATES
Liu, Junjie, San Diego, CA, UNITED STATES
Norman, Thea, San Diego, CA, UNITED STATES
Driver, Russell, Solana Beach, CA, UNITED STATES
PA Ambrx, Inc., La Jolla, CA, UNITED STATES (U.S. corporation)
PI US 2006217289 A1 20060928
AI US 2005-313305 A1 20051221 (11)
PRAI US 2004-638418P 20041222 (60)
US 2004-638527P 20041222 (60)
US 2004-639195P 20041222 (60)
US 2005-696210P 20050701 (60)
US 2005-696302P 20050701 (60)
US 2005-696068P 20050701 (60)
DT Utility
FS APPLICATION
LREP WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 94304-1050, US
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 65 Drawing Page(s)
LN.CNT 14401
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed herein are non-natural amino acids and polypeptides that

include at least one non-natural amino acid, and methods for making such non-natural amino acids and polypeptides. The non-natural amino acids, by themselves or as a part of a polypeptide, can include a wide range of possible functionalities, but typical have at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Also disclosed herein are non-natural amino acid polypeptides that are further modified post-translationally, methods for effecting such modifications, and methods for purifying such polypeptides. Typically, the modified non-natural amino acid polypeptides include at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Further disclosed are methods for using such non-natural amino acid polypeptides and modified non-natural amino acid polypeptides, including therapeutic, diagnostic, and other biotechnology uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 20 OF 58 USPATFULL on STN
AN 2006:227892 USPATFULL
TI Compositions containing, methods involving, and uses of non-natural amino acids and polypeptides
IN Miao, Zhenwei, San Diego, CA, UNITED STATES
Liu, Junjie, San Diego, CA, UNITED STATES
Norman, Thea, San Diego, CA, UNITED STATES
Driver, Russell, Solana Beach, CA, UNITED STATES
PA Ambrx, Inc., La Jolla, CA, UNITED STATES (U.S. corporation)
PI US 2006194256 A1 20060831
US 7332571 B2 20080219
AI US 2005-313306 A1 20051221 (11)
PRAI US 2004-638418P 20041222 (60)
US 2004-638527P 20041222 (60)
US 2004-639195P 20041222 (60)
US 2005-696210P 20050701 (60)
US 2005-696302P 20050701 (60)
US 2005-696068P 20050701 (60)
DT Utility
FS APPLICATION
LREP WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 94304-1050, US
CLMN Number of Claims: 33
ECL Exemplary Claim: 1
DRWN 65 Drawing Page(s)
LN.CNT 13847
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed herein are non-natural amino acids and polypeptides that include at least one non-natural amino acid and methods for making such non-natural amino acids and polypeptides. The non-natural amino acids, by themselves or as a part of a polypeptide, can include a wide range of possible functionalities, but typical have at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Also disclosed herein are non-natural amino acid polypeptides that are further modified post-translationally, methods for effecting such modifications, and methods for purifying such polypeptides. Typically, the modified non-natural amino acid polypeptides include at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Further disclosed are methods for using such non-natural amino acid polypeptides and modified non-natural amino acid polypeptides, including therapeutic, diagnostic, and other biotechnology uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 21 OF 58 USPATFULL on STN

AN 2006:222245 USPATFULL
TI Modified human growth hormone
IN Cho, Ho Sung, San Diego, CA, UNITED STATES
Daniel, Thomas O., La Jolla, CA, UNITED STATES
DiMarchi, Richard D., Carmel, IN, UNITED STATES
Hays, Anna-Maria, La Jolla, CA, UNITED STATES
Wilson, Troy E., San Marino, CA, UNITED STATES
Sim, Bee-Cheng, San Diego, CA, UNITED STATES
Litzinger, David C., Poway, CA, UNITED STATES
PA Ambrx, INc., La Jolla, CA, UNITED STATES (U.S. corporation)
PI US 2006189529 A1 20060824
AI US 2005-316534 A1 20051221 (11)
PRAI US 2004-638616P 20041222 (60)
US 2005-727996P 20051017 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10975 NORTH TORREY PINES ROAD, SUITE 100, LA JOLLA, CA, 92037, US
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN 36 Drawing Page(s)
LN.CNT 11514
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modified growth hormone polypeptide and uses thereof are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 22 OF 58 USPATFULL on STN
AN 2006:221686 USPATFULL
TI Natural, chimeric and hybrid glycosaminoglycan polymers and methods of making and using same
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
PI US 2006188966 A1 20060824
AI US 2002-195908 A1 20020715 (10)
RLI Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser. No. US 2001-842484, filed on 25 Apr 2001, ABANDONED Continuation-in-part of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING
PRAI US 2001-305263P 20010713 (60)
US 1998-107929P 19981111 (60)
US 1998-80414P 19980402 (60)
US 2000-199538P 20000425 (60)
US 2001-289554P 20010508 (60)
US 2001-345497P 20011109 (60)
US 2002-350642P 20020122 (60)
US 2002-391787P 20020620 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 11
ECL Exemplary Claim: 1-172
DRWN 36 Drawing Page(s)
LN.CNT 8978
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate or chondroitin or heparin/heparosan synthases from Pasteurella multocida, in order to create a variety of glycosaminoglycan oligosaccharides having a natural or chimeric or hybrid sugar structure.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 23 OF 58 USPATFULL on STN
AN 2006:215048 USPATFULL
TI Polymer grafting by polysaccharide synthases
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
PI US 2006183203 A1 20060817
AI US 2006-409323 A1 20060424 (11)
RLI Continuation of Ser. No. US 2002-197153, filed on 16 Jul 2002, GRANTED, Pat. No. US 7060469 Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 3295
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate synthase from Pasteurella multocida.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 24 OF 58 USPATFULL on STN
AN 2006:215043 USPATFULL
TI Methods for expression and purification of recombinant human growth hormone
IN Buechler, Ying, Carlsbad, CA, UNITED STATES
Lieu, Ricky, San Diego, CA, UNITED STATES
Ong, Michael, San Diego, CA, UNITED STATES
Bussell, Stuart, Carlsbad, CA, UNITED STATES
Knudsen, Nick, San Diego, CA, UNITED STATES
Cho, Ho Sung, San Diego, CA, UNITED STATES
PA Ambrx, Inc., La Jolla, CA, UNITED STATES (U.S. corporation)
PI US 2006183198 A1 20060817
AI US 2005-315752 A1 20051221 (11)
PRAI US 2004-638616P 20041222 (60)
US 2005-655744P 20050223 (60)
US 2005-680977P 20050513 (60)
US 2005-727968P 20051017 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10975 NORTH TORREY PINES ROAD, SUITE 100, LA JOLLA, CA, 92037, US
CLMN Number of Claims: 12
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 8282
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates generally to the production, purification, and isolation of human growth hormone (hGH). More particularly, the invention relates to the production, purification, and isolation of substantially purified hGH from recombinant host cells or culture medium including, for example, yeast, insect, mammalian and bacterial host cells. The process of the present invention is also useful for purification of hGH linked to polymers or other molecules.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 25 OF 58 USPATFULL on STN
AN 2006:204492 USPATFULL
TI Chitinase encoding DNA molecules from cotton expressed preferentially in secondary walled cells during secondary wall deposition and a corresponding promoter
IN Haigler, Candace H., Raleigh, NC, UNITED STATES
Zhang, Hong, Lubbock, TX, UNITED STATES
Wu, Chunfa, Lubbock, TX, UNITED STATES
Zhang, Deshui, Sacramento, CA, UNITED STATES
PI US 2006174379 A1 20060803
AI US 2006-397479 A1 20060404 (11)
RLI Continuation of Ser. No. US 2003-350696, filed on 23 Jan 2003, PENDING Continuation-in-part of Ser. No. US 2001-918083, filed on 30 Jul 2001, ABANDONED
DT Utility
FS APPLICATION
LREP NIXON PEABODY LLP - PATENT GROUP, CLINTON SQUARE, P.O. BOX 31051, ROCHESTER, NY, 14603-1051, US
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 4433
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to isolated nucleic acid molecules encoding endogenous cotton chitinases and corresponding promoters, which are preferentially expressed in secondary walled cells during secondary wall deposition. The polypeptide encoded by the nucleic acid molecule, a DNA construct linking the isolated nucleic acid molecule with a promoter, the DNA construct incorporated in an expression system, a host cell, a plant, or a plant seed are also disclosed. The present invention also relates to a DNA construct linking the isolated promoters with a second DNA as well as expression systems, host cells, plants, or plant seeds containing the DNA construct. Methods of imparting resistance to insects and fungi, regulating the fiber cellulose content, and methods of expressing a gene preferentially in secondary walled cells during secondary wall deposition are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 26 OF 58 USPATFULL on STN
AN 2006:181465 USPATFULL
TI Novel antigen-binding polypeptides and their uses
IN Cho, Ho Sung, San Diego, CA, UNITED STATES
Daniel, Thomas O., La Jolla, CA, UNITED STATES
Wilson, Troy E., San Marino, CA, UNITED STATES
Cujec, Thomas P., San Diego, CA, UNITED STATES
Tian, Feng, San Diego, CA, UNITED STATES
Hays, Anna-Maria, La Jolla, CA, UNITED STATES
Kimmel, Bruce E., San Diego, CA, UNITED STATES
Ho, Lillian, San Diego, CA, UNITED STATES
PA Ambrx, Inc., San Diego, CA, UNITED STATES (U.S. corporation)
PI US 2006153860 A1 20060713
AI US 2005-155909 A1 20050617 (11)
PRAI US 2004-581334P 20040618 (60)
US 2005-648222P 20050128 (60)
US 2005-654018P 20050217 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10975 NORTH TORREY PINES ROAD,

SUITE 100, LA JOLLA, CA, 92037, US
CLMN Number of Claims: 23
ECL Exemplary Claim: 1
DRWN 21 Drawing Page(s)
LN.CNT 9776
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel antigen-binding polypeptides (ABP) and uses thereof are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 27 OF 58 USPATFULL on STN
AN 2006:159892 USPATFULL
TI Formulations of human growth hormone comprising a non-naturally encoded amino acid
IN Hays, Anna-Maria, La Jolla, CA, UNITED STATES
Buechler, Ying, Carlsbad, CA, UNITED STATES
Litzinger, David C., Poway, CA, UNITED STATES
PA Ambrx, Inc., La Jolla, CA, UNITED STATES (U.S. corporation)
PI US 2006135427 A1 20060622
AI US 2005-316483 A1 20051221 (11)
PRAI US 2004-638616P 20041222 (60)
US 2005-680617P 20050513 (60)
US 2005-728035P 20051017 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10975 NORTH TORREY PINES ROAD, SUITE 100, LA JOLLA, CA, 92037, US
CLMN Number of Claims: 55
ECL Exemplary Claim: 1
DRWN 88 Drawing Page(s)
LN.CNT 8463
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Formulations of modified human growth hormone polypeptides are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 28 OF 58 USPATFULL on STN
AN 2006:137768 USPATFULL
TI Polymer grafting by polysaccharide synthases
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
PI US 2006116348 A1 20060601
AI US 2005-178560 A1 20050711 (11)
RLI Continuation of Ser. No. US 2002-184485, filed on 27 Jun 2002, ABANDONED Continuation of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED
PRAI US 1998-107929P 19981111 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 14
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 2252
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate synthase from Pasteurella multocida. The present invention also relates to coatings for biomaterials wherein the coatings provide protective properties to the biomaterial and/or act as a

bioadhesive. Such coatings could be applied to electrical devices, sensors, catheters and any device which may be contemplated for use within a mammal. The present invention further relates to drug delivery matrices which are biocompatible and may comprise combinations of a biomaterial or a bioadhesive and a medicament or a medicament-containing liposome. The biomaterial and/or bioadhesive is a hyaluronic acid polymer produced by a hyaluronate synthase from Pasteurella multocida. The present invention also relates to the creation of chimeric molecules containing hyaluronic acid or hyaluronic acid-like chains attached to various compounds and especially carbohydrates or hydroxyl containing substances. The present invention also relates to a chondroitan synthase from Pasteurella multocida which is capable of producing polysaccharide polymers on an acceptor or primer molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 29 OF 58 USPATFULL on STN
AN 2006:124698 USPATFULL
TI Polymer grafting by polysaccharide synthases using artificial sugar acceptors
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
PI US 2006105431 A1 20060518
AI US 2005-253453 A1 20051019 (11)
RLI Continuation-in-part of Ser. No. US 2005-178560, filed on 11 Jul 2005, PENDING Continuation of Ser. No. US 2002-184485, filed on 27 Jun 2002, ABANDONED Continuation of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser. No. US 2004-814752, filed on 31 Mar 2004, PENDING Continuation-in-part of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING Continuation-in-part of Ser. No. US 2005-42530, filed on 24 Jan 2005, PENDING Continuation of Ser. No. US 2001-842484, filed on 25 Apr 2001, ABANDONED
PRAI US 2004-620162P 20041019 (60)
US 1998-107929P 19981111 (60)
US 2003-458939P 20030331 (60)
US 2001-289554P 20010508 (60)
US 2001-296386P 20010606 (60)
US 2001-303691P 20010706 (60)
US 2001-313258P 20010817 (60)
US 2000-199538P 20000425 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 9 Drawing Page(s)
LN.CNT 3322
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the glycosaminoglycan synthases from Pasteurella multocida. The methodology of the present invention includes providing an enzymatically active glycosaminoglycan synthase enzyme from Pasteurella multocida, providing a synthetic, artificial acceptor for the glycosaminoglycan synthase enzyme; combining the synthetic, artificial acceptor with the glycosaminoglycan synthase enzyme within a reaction medium, wherein the reaction medium contains at least one sugar precursor selected from the group consisting of UDP-GlcA, UDP-GlcNAc, UDP-GalNAc, and reacting the glycosaminoglycan synthase enzyme with the synthetic, artificial

acceptor to produce an oligosaccharide or polysaccharide polymer. The glycosaminoglycan synthase enzyme may be hyaluronan synthase, chondroitin synthase, or heparosan synthase from P. multocida, and the oligosaccharide or polysaccharide polymer may be hyaluronic acid (hyaluronan), chondroitin, heparosan, or combinations thereof.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 30 OF 58 USPATFULL on STN
AN 2006:21514 USPATFULL
TI Biosynthetic polypeptides utilizing non-naturally encoded amino acids
IN Cho, Ho Sung, San Diego, CA, UNITED STATES
Daniel, Thomas O., La Jolla, CA, UNITED STATES
Hays, Anna-Maria, La Jolla, CA, UNITED STATES
Wilson, Troy E., San Marino, CA, UNITED STATES
Litzinger, David C., Poway, CA, UNITED STATES
Mariani, Roberto, San Diego, CA, UNITED STATES
Kimmel, Bruce E., San Diego, CA, UNITED STATES
Keefe, William M., San Diego, CA, UNITED STATES
PA Ambrx, Inc., San Diego, CA, UNITED STATES (U.S. corporation)
PI US 2006019347 A1 20060126
AI US 2005-187687 A1 20050721 (11)
PRAI US 2004-590035P 20040721 (60)
US 2005-659709P 20050307 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10410 SCIENCE CENTER DRIVE, SAN DIEGO, CA, 92121, US
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN 13 Drawing Page(s)
LN.CNT 11604
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modified biosynthetic polypeptide molecules, methods for manufacturing, and uses thereof are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 31 OF 58 USPATFULL on STN
AN 2005:326440 USPATFULL
TI Composition for accelerating seed germination and plant growth
IN Smith, Donald, Sainte-Anne-de-Bellevue, CANADA
Bo, Pan, Sainte-Anne-de-Bellevue, CANADA
Deng, Yinghai, Montreal, CANADA
Migner, Pierre, Saint-Anne-de-Bellevue, CANADA
Zhang, Feng, Sainte-Anne-de-Bellevue, CANADA
Prithiviraj, Balakrishnan, Sainte-Anne-de-Bellevue, CANADA
Habib, Ahsan, Sainte-Anne-de-Bellevue, CANADA
PA Bios Agriculture Inc., Ontario, CANADA (non-U.S. corporation)
McGill University, Quebec, CANADA (non-U.S. corporation)
PI US 6979664 B1 20051227
WO 2000004778 20000203
AI US 2001-744129 19990721 (9)
WO 1999-CA666 19990721
20010621 PCT 371 date
PRAI CA 1998-2243669 19980721
DT Utility
FS GRANTED
EXNAM Primary Examiner: Clardy, S. Mark
LREP Merchant & Gould P.C.
CLMN Number of Claims: 35

ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 1479
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Lipo Chitooligosaccharide (LCO) [NodBj-V(C18:1,Mefuc)] isolated from Bradyrhizobium japonicum strain 532C was able to stimulate seed germination/seedling emergence, or in the case of potato, sprouting, of a number of crop plants representing eight distantly related plant families (Poaceae, Fabaceae, Brassicaceae, Cucurbitaceac, Malvaceae, Asteraceae, Chenopodiaceae and Solanaceae) of plants, at 25 and/or at 15.degree. C. It also promoted sprouting potato minitubers. Other LCOs [NodRM-V(C.sub.16:2,5) and LCO from R. leguminosarum] were also shown to also display growth-promoting effects on the tested crop plants. The compositions comprising at least one LCO are shown to be effective in promoting growth under both laboratory and field conditions. The invention thus also relates to methods for promoting seed germination and/or seedling emergence and/or growth of plants comprising subjecting the seeds and/or plants to an effective amount of an agricultural composition comprising at least one LCO.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 32 OF 58 USPATFULL on STN
AN 2005:286919 USPATFULL
TI In vivo incorporation of unnatural amino acids
IN Schultz, Peter, La Jolla, CA, UNITED STATES
Wang, Lei, San Diego, CA, UNITED STATES
Anderson, John Christopher, San Diego, CA, UNITED STATES
Chin, Jason William, Cambridge, UNITED KINGDOM
Liu, David R., Lexington, MA, UNITED STATES
Magliery, Thomas J., North Haven, CT, UNITED STATES
Meggers, Eric L., Philadelphia, PA, UNITED STATES
Mehl, Ryan A., Lancaster, PA, UNITED STATES
Pastrnak, Miro, San Diego, CA, UNITED STATES
Santoro, Stephen William, Cambridge, MA, UNITED STATES
Zhang, Zhiwen, San Diego, CA, UNITED STATES
PA The Scripps Research Institute, La Jolla, CA, UNITED STATES (U.S. corporation)
PI US 2005250183 A1 20051110
AI US 2004-17550 A1 20041217 (11)
RLI Continuation of Ser. No. US 2002-126927, filed on 19 Apr 2002, PENDING
PRAI US 2001-285030P 20010419 (60)
US 2002-355514P 20020206 (60)
DT Utility
FS APPLICATION
LREP QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501, US
CLMN Number of Claims: 33
ECL Exemplary Claim: 1-47
DRWN 37 Drawing Page(s)
LN.CNT 8768
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for in vivo incorporation of unnatural amino acids. Also provided are compositions including proteins with unnatural amino acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 33 OF 58 USPATFULL on STN
AN 2005:254268 USPATFULL
TI Modified human interferon polypeptides and their uses

IN Cho, Ho Sung, San Diego, CA, UNITED STATES
    Daniel, Thomas O., San Diego, CA, UNITED STATES
    Hays, Anna-Maria, La Jolla, CA, UNITED STATES
    Wilson, Troy E., San Marino, CA, UNITED STATES
PA Ambrx, Inc., San Diego, CA, UNITED STATES (U.S. corporation)
PI US 2005220762 A1 20051006
AI US 2005-46440 A1 20050128 (11)
PRAI US 2004-541528P 20040202 (60)
    US 2004-581314P 20040618 (60)
    US 2004-581175P 20040618 (60)
    US 2004-580885P 20040618 (60)
    US 2004-638616P 20041222 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10410 SCIENCE CENTER DRIVE, SAN DIEGO, CA, 92121, US
CLMN Number of Claims: 95
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 10198
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modified human interferon polypeptides and uses thereof are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 34 OF 58 USPATFULL on STN
AN 2005:196262 USPATFULL
TI Modified human growth hormone polypeptides and their uses
IN Cho, Ho Sung, San Diego, CA, UNITED STATES
    Daniel, Thomas O., La Jolla, CA, UNITED STATES
    DiMarchi, Richard D., Carmel, IN, UNITED STATES
    Hays, Anna-Maria, La Jolla, CA, UNITED STATES
    Wilson, Troy E., San Marino, CA, UNITED STATES
    Sim, Bee-Cheng, San Diego, CA, UNITED STATES
    Litzinger, David C., Poway, CA, UNITED STATES
PA Ambrx, Inc., San Diego, CA, UNITED STATES (U.S. corporation)
PI US 2005170404 A1 20050804
AI US 2005-46432 A1 20050128 (11)
PRAI US 2004-541528P 20040202 (60)
    US 2004-581314P 20040618 (60)
    US 2004-581175P 20040618 (60)
    US 2004-580885P 20040618 (60)
    US 2004-638616P 20041222 (60)
DT Utility
FS APPLICATION
LREP ATTN: JOHN W. WALLEN, III, AMBRX, INC., 10410 SCIENCE CENTER DRIVE, SAN DIEGO, CA, 92121, US
CLMN Number of Claims: 100
ECL Exemplary Claim: 1
DRWN 22 Drawing Page(s)
LN.CNT 9124
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Modified human growth hormone polypeptides and uses thereof are provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 35 OF 58 USPATFULL on STN
AN 2005:144311 USPATFULL
TI Polymer grafting by polysaccharide synthases
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES

PI US 2005124046 A1 20050609
    US 7060469 B2 20060613
AI US 2002-197153 A1 20020716 (10)
RLI Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113, US
CLMN Number of Claims: 37
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 2615
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate synthase from Pasteurella multocida.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 36 OF 58 USPATFULL on STN
AN 2005:4967 USPATFULL
TI Pharmaceutical composition comprising chito-oligomers
IN Gislason, Johannes, Reykjavik, ICELAND
    Elnarsson, Jon M., Reykjavik, ICELAND
    Peter, Martin, Golm, GERMANY, FEDERAL REPUBLIC OF
    Bahrke, Sven, Golm, GERMANY, FEDERAL REPUBLIC OF
PI US 2005004073 A1 20050106
AI US 2004-490637 A1 20040325 (10)
    WO 2002-IS16 20020926
PRAI IS 2001-6085 20010926
DT Utility
FS APPLICATION
LREP BIRCH STEWART KOLASCH & BIRCH, PO BOX 747, FALLS CHURCH, VA, 22040-0747
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 749
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions are provided comprising chito-oligomers obtainable from chitin, comprising oligomers of N-acetyl glucosamine (NAG) and glucosamine, wherein at least 50% of the oligomers have a chain length of about 2-50, and the degree of deacetylation of the oligomers is in the range of about 0-70%, preferably about 30-50%. The compositions are highly useful as pharmaceutical compositions for treatment of joint disorders such as rheumatoid arthritis and osteoarthritis. Also provided are methods for treatment of joint disorders and treatment against inflammatory activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 37 OF 58 USPATFULL on STN
AN 2004:300227 USPATFULL
TI Branched cyclic tetrasaccharide, process for producing the same, and use
IN Aga, Hajime, Okayama, JAPAN
    Higashiyama, Takanobu, Okayama, JAPAN
    Watanabe, Hiraku, Okayama, JAPAN
    Sonoda, Tomohiko, Okayama, JAPAN
    Kubota, Michio, Okayama, JAPAN
PI US 2004236097 A1 20041125

PI US 7223570 B2 20070529
AI US 2003-471377 A1 20030909 (10)
WO 2002-JP2213 20020308
PRAI JP 2001-67282 20010309
DT Utility
FS APPLICATION
LREP BROWDY AND NEIMARK, P.L.L.C., 624 NINTH STREET, NW, SUITE 300, WASHINGTON, DC, 20001-5303
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 20 Drawing Page(s)
LN.CNT 3367
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The object of the present invention is to provide a novel glycosyl derivative of cyclotetrasaccharide represented by cyclo{→6)-α-D-glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→6)-α-D-glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→}, and it is solved by providing a branched cyclotetrasaccharide, wherein one or more hydrogen atoms in the hydroxyl groups of cyclotetrasaccharide are replaced with an optionally substituted glycosyl group, with the proviso that, when only one hydrogen atom in the C-6 hydroxyl group among the above hydrogen atoms is substituted with an optionally-substituted glycosyl group, the substituted glycosyl group is one selected from those excluding D-glucosyl group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 38 OF 58 USPATFULL on STN
AN 2004:171982 USPATFULL
TI Targeted glycosaminoglycan polymers by polymer grafting and methods of making and using same
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
Jing, Wei, Edmond, OK, UNITED STATES
PI US 2004132143 A1 20040708
US 7223571 B2 20070529
AI US 2003-642248 A1 20030815 (10)
RLI Continuation-in-part of Ser. No. US 2002-195908, filed on 15 Jul 2002, PENDING Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser. No. US 2001-842484, filed on 25 Apr 2001, PENDING Continuation-in-part of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING
PRAI US 2002-404356P 20020816 (60)
US 2003-479432P 20030618 (60)
US 1998-107929P 19981111 (60)
US 1998-80414P 19980402 (60)
US 2000-199538P 20000425 (60)
US 2001-289554P 20010508 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73113
CLMN Number of Claims: 111
ECL Exemplary Claim: 1
DRWN 41 Drawing Page(s)
LN.CNT 8221
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate or chondroitin or heparin/heparosan synthases from Pasteurella, in order to create a variety of glycosaminoglycan

oligosaccharides having a natural or chimeric or hybrid sugar structure with a targeted size that are substantially monodisperse in size.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 39 OF 58 USPATFULL on STN
AN 2004:65289 USPATFULL
TI Chitinase encoding DNA molecules from cotton expressed preferentially in secondary walled cells during secondary wall deposition and a corresponding promoter
IN Haigler, Candace H., Lubbock, TX, UNITED STATES
Zhang, Hong, Lubbock, TX, UNITED STATES
Wu, Chunfa, Lubbock, TX, UNITED STATES
Wan, Chun-Hua, Gaithersburg, MA, UNITED STATES
Zhang, Deshui, Lubbock, TX, UNITED STATES
PI US 2004049808 A1 20040311
US 7098324 B2 20060829
AI US 2003-350696 A1 20030123 (10)
RLI Continuation-in-part of Ser. No. US 2001-918083, filed on 30 Jul 2001, ABANDONED
DT Utility
FS APPLICATION
LREP Michael L. Goldman, NIXON PEABODY LLP, Clinton Square, P.O. Box 31051, Rochester, NY, 14603
CLMN Number of Claims: 94
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 4718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to isolated nucleic acid molecules encoding endogenous cotton chitinases and corresponding promoters, which are preferentially expressed in secondary walled cells during secondary wall deposition. The polypeptide encoded by the nucleic acid molecule, a DNA construct linking the isolated nucleic acid molecule with a promoter, the DNA construct incorporated in an expression system, a host cell, a plant, or a plant seed are also disclosed. The present invention also relates to a DNA construct linking the isolated promoters with a second DNA as well as expression systems, host cells, plants, or plant seeds containing the DNA construct. Methods of imparting resistance to insects and fungi, regulating the fiber cellulose content, and methods of expressing a gene preferentially in secondary walled cells during secondary wall deposition are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 40 OF 58 USPATFULL on STN
AN 2003:228246 USPATFULL
TI Methods of determining SAM-dependent methyltransferase activity using a mutant SAH hydrolase
IN Yuan, Chong-Sheng, San Diego, CA, United States
PA General Atomics, San Diego, CA, United States (U.S. corporation)
PI US 6610504 B1 20030826
AI US 2000-546013 20000410 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Steadman, David J.
LREP Morrison & Foerster LLP
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 6392
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to compositions and methods for assaying the activity of methyltransferases, such as S-adenosylmethionine (SAM)-dependent methyltransferases. The methods can be used for screening for modulators of such methyltransferases, for identifying substrates and for diagnostics. The methods are amenable for use in high throughput formats. Kits for performing the methods are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 41 OF 58 USPATFULL on STN
AN 2003:159875 USPATFULL
TI Composite stimulating iNOS enzyme which induce immuno-reactant nitric oxide synthesis and process for preparing the same
IN You, Hyung Ja, Kyungki-do, KOREA, REPUBLIC OF
Seo, Sang Bong, Kyungki-do, KOREA, REPUBLIC OF
Seo, Chan Seok, Kyungki-do, KOREA, REPUBLIC OF
PI US 2003109490 A1 20030612
AI US 2002-192804 A1 20020709 (10)
PRAI KR 2001-40955 20010709
DT Utility
FS APPLICATION
LREP PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711
CLMN Number of Claims: 7
ECL Exemplary Claim: 1
DRWN 4 Drawing Page(s)
LN.CNT 813
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to a composite stimulating iNOS enzyme which induce immuno-reactant Nitric Oxide (NO) synthesis and a process for preparing the same. More particularly, it relates to a composite stimulating iNOS enzyme which is inducible immuno-reactant NO synthase prepared by nano-coating and binding water soluble β-glucosamin with immuno-protein where the water soluble β-glucosamin is produced by ultrasonic degradation of chitin/chitosan in NaCl solution, degradation employing lysozyme, washing with ethanol, and ion-exchange, thus containing distinctive functional element from the conventional chitosan.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 42 OF 58 USPATFULL on STN
AN 2003:120094 USPATFULL
TI In vivo incorporation of unnatural amino acids
IN Schultz, Peter, La Jolla, CA, UNITED STATES
Wang, Lei, San Diego, CA, UNITED STATES
Anderson, John Christopher, San Diego, CA, UNITED STATES
Chin, Jason William, San Diego, CA, UNITED STATES
Liu, David R., Lexington, MA, UNITED STATES
Magliery, Thomas J., North Haven, CT, UNITED STATES
Meggers, Eric L., Philadelphia, PA, UNITED STATES
Mehl, Ryan A., San Diego, CA, UNITED STATES
Pastrnak, Miro, San Diego, CA, UNITED STATES
Santoro, Stephen William, San Diego, CA, UNITED STATES
Zhang, Zhiwen, San Diego, CA, UNITED STATES
PA The Scripps Research Institute, La Jolla, CA, UNITED STATES, 92073 (U.S. corporation)
PI US 2003082575 A1 20030501
US 7045337 B2 20060516

AI US 2002-126927 A1 20020419 (10)
PRAI US 2001-285030P 20010419 (60)
US 2002-355514P 20020206 (60)
DT Utility
FS APPLICATION
LREP QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501
CLMN Number of Claims: 140
ECL Exemplary Claim: 1
DRWN 37 Drawing Page(s)
LN.CNT 6984
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for in vivo incorporation of unnatural amino acids. Also provided are compositions including proteins with unnatural amino acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 43 OF 58 USPATFULL on STN
AN 2003:113030 USPATFULL
TI Polymer grafting by polysaccharide synthases
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
PI US 2003077763 A1 20030424
AI US 2002-184485 A1 20020627 (10)
RLI Continuation of Ser. No. US 1999-437277, filed on 10 Nov 1999, GRANTED, Pat. No. US 6444447 Continuation of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED
PRAI US 1998-107929P 19981111 (60)
DT Utility
FS APPLICATION
LREP DUNLAP, CODDING & ROGERS P.C., PO BOX 16370, OKLAHOMA CITY, OK, 73114
CLMN Number of Claims: 42
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 2040
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate synthase from Pasteurella multocida. The present invention also relates to coatings for biomaterials wherein the coatings provide protective properties to the biomaterial and/or act as a bioadhesive. Such coatings could be applied to electrical devices, sensors, catheters and any device which may be contemplated for use within a mammal. The present invention further relates to drug delivery matrices which are biocompatible and may comprise combinations of a biomaterial or a bioadhesive and a medicament or a medicament-containing liposome. The biomaterial and/or bioadhesive is a hyaluronic acid polymer produced by a hyaluronate synthase from Pasteurella multocida. The present invention also relates to the creation of chimeric molecules containing hyaluronic acid or hyaluronic acid--like chains attached to various compounds and especially carbohydrates or hydroxyl containing substances. The present invention also relates to a chondroitan synthase from Pasteurella multocida which is capable of producing polysaccharide polymers on an acceptor or primer molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 44 OF 58 USPATFULL on STN
AN 2002:224440 USPATFULL
TI Polymer grafting by polysaccharide synthases
IN DeAngelis, Paul L., Edmond, OK, United States

PA The Board of Regents of the University of Oklahoma, Norman, OK, United States (U.S. corporation)
PI US 6444447 B1 20020903
AI US 1999-437277 19991110 (9)
RLI Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999
PRAI US 1998-107929P 19981111 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Nashed, Nashaat T.
LREP Dunlap, Codding & Rogers, P.C.
CLMN Number of Claims: 48
ECL Exemplary Claim: 1
DRWN 11 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 2329
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate synthase from Pasteurella multocida. The present invention also relates to coatings for biomaterials wherein the coatings provide protective properties to the biomaterial and/or act as a bioadhesive. Such coatings could be applied to electrical devices, sensors, catheters and any device which may be contemplated for use within a mammal. The present invention further relates to drug delivery matrices which are biocompatible and may comprise combinations of a biomaterial or a bioadhesive and a medicament or a medicament-containing liposome. The biomaterial and/or bioadhesive is a hyaluronic acid polymer produced by a hyaluronate synthase from Pasteurella multocida. The present invention also relates to the creation of chimeric molecules containing hyaluronic acid or hyaluronic acid-like chains attached to various compounds and especially carbohydrates or hydroxyl containing substances. The present invention also relates to a chondroitan synthase from Pasteurella multocida which is capable of producing polysaccharide polymers on an acceptor or primer molecule.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 45 OF 58 USPATFULL on STN
AN 2002:3856 USPATFULL
TI Low cost manufacture of oligosaccharides
IN Defrees, Shawn, North Wales, PA, UNITED STATES
Johnson, Karl, Willow Grove, PA, UNITED STATES
PI US 2002001831 A1 20020103
AI US 2001-757289 A1 20010108 (9)
RLI Continuation of Ser. No. US 1999-442111, filed on 17 Nov 1999, PENDING
PRAI US 1998-109031P 19981118 (60)
US 1998-109096P 19981119 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 71
ECL Exemplary Claim: 1
DRWN 11 Drawing Page(s)
LN.CNT 2764
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention provides recombinant cells, reaction mixtures, and methods that are useful for the enzymatic synthesis of product saccharides. The recombinant cells contain a heterologous gene that encodes a glycosyltransferase which catalyzes at least one step of the enzymatic synthesis, as well as a system for generating a nucleotide sugar that can serve as a substrate for the glycosyltransferase.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 46 OF 58 USPATFULL on STN
AN 97:112354 USPATFULL
TI Thermostable, salt tolerant, wide pH range novel chitobiase
IN Laine, Roger A., Baton Rouge, LA, United States
Ou, Chin-Yih, Dunwoody, GA, United States
PA Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, Baton Rouge, LA, United States (U.S. corporation)
PI US 5693519 19971202
AI US 1995-455837 19950531 (8)
RLI Division of Ser. No. US 1993-171208, filed on 21 Dec 1993, now patented, Pat. No. US 5602020 which is a continuation of Ser. No. US 1992-844301, filed on 27 Feb 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Prouty, Rebecca E.
LREP Runnels, John H.
CLMN Number of Claims: 18
ECL Exemplary Claim: 11
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 470
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A cloned chitobiase from a Vibrio parahemolyticus gene cloned into the plasmid pUC18 in E. coli strain DH5α. The plasmid construct, called pC120, had a 6.4 kb DNA insert. The recombinant gene expressed chitobiase activity similar to that found in native V. parahemolyticus. In addition to chitobiose, at least six additional substrates were observed to be hydrolyzed by the recombinant chitobiase, including β-N-acetyl galactosamine glycosides, showing that the enzyme is an N-acetyl-hexosaminidase. The enzyme showed resistance to denaturation by 2M NaCl, was thermostable at 45.degree. C., and possessed an unusual range of activity from pH 5 to 9. The enzyme is useful in the degradation of crustacean shells. It catalyzes the production of N-acetyl-glucosamine, a compound which should be valuable as a chiral precursor or intermediate in the synthesis or manufacture of pharmaceutical compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 47 OF 58 USPATFULL on STN
AN 97:12360 USPATFULL
TI Thermostable, salt tolerant, wide PH range novel chitobiase
IN Laine, Roger A., Baton Rouge, LA, United States
Ou, Chin-Yih, Dunwoody, GA, United States
PA Board of Supervisors of Louisiana State University and Agricultural and Mechanical College, Baton Rouge, LA, United States (U.S. corporation)
PI US 5602020 19970211
AI US 1993-171208 19931221 (8)
RLI Continuation of Ser. No. US 1992-844301, filed on 27 Feb 1992, now abandoned
DT Utility
FS Granted
EXNAM Primary Examiner: Wax, Robert A.; Assistant Examiner: Pouty, Rebecca
LREP Runnels, John H.
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 1 Drawing Figure(s); 1 Drawing Page(s)
LN.CNT 426
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A cloned chitobiase from a Vibrio parahemolyticus gene cloned into the plasmid pUC18 in E. coli strain DH5α. The plasmid construct, called pC120, had a 604 kb DNA insert. The recombinant gene expressed chitobiase activity similar to that found in native V. parahemolyticus. In addition to chitobiose, at least six additional substrates were observed to be hydrolyzed by the recombinant chitobiase, including β-N-acetyl galactosamine glycosides, showing that the enzyme is an N-acetyl-hexosaminidase. The enzyme showed resistance to denaturation by 2M NaCl, was thermostable at 45.degree. C., and possessed an unusual range of activity from pH 5 to 9. The enzyme is useful in the degradation of crustacean shells. It catalyzes the production of N-acetyl-glucosamine, a compound which should be valuable as a chiral precursor or intermediate in the synthesis or manufacture of pharmaceutical compounds.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 48 OF 58 USPATFULL on STN
AN 93:102834 USPATFULL
TI Functionalized poly(hydroxyalkanoates) and methods of manufacturing same
IN Yalpani, Manssur, 560 Leparc, Buffalo Grove, IL, United States 60089
PI US 5268422 19931207
AI US 1992-973730 19921109 (7)
RLI Division of Ser. No. US 1990-554338, filed on 19 Jul 1990, now patented, Pat. No. US 5191016
DT Utility
FS Granted
EXNAM Primary Examiner: Nutter, Nathan M.
LREP Marshall, O'Toole, Gerstein, Murray & Borun
CLMN Number of Claims: 21
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 880
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Functionalized poly(hydroxyalkanoate) derivatives having the general structural formula: ##STR1## wherein Y is hydrogen, a saccharide moiety or an alkenyl moiety having a molecular weight in the range of from about 25 to about 100,000; R.sub.1, R.sub.2 and R.sub.3 are, independently, hydrogen, an aromatic moiety, an alkyl moiety or an alkenyl moiety, said alkyl moiety or alkenyl moiety including from one to about nine carbon atoms; A is carbonyl or methylene; X is oxygen or imino (--NH); Z is selected from the group consisting of hydrogen, a saccharide moiety, an alkyl moiety and an alkenyl moiety having a molecular weight in the range of from about 25 to about 100,000, with the proviso that if Y is hydrogen, Z is not hydrogen; r.sub.1, r.sub.2 and r.sub.3 are, independently, a numeral 1, 2 or 3; m and n are, independently, a numeral in the range of from one to about 5; and q is a numeral in the range of from about 5 to about 10,000, and a novel method of manufacturing the functionalized poly(hydroxyalkanoate) derivatives, are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 49 OF 58 USPATFULL on STN
AN 93:16734 USPATFULL
TI Functionalized poly(hydroxyalkanoates) and method of manufacturing same
IN Yalpani, Manssur, 560 Leparc, Buffalo Grove, IL, United States 60089
PI US 5191016 19930302
AI US 1990-554338 19900719 (7)

DT Utility
FS Granted
EXNAM Primary Examiner: Nutter, Nathan M.
LREP Marshall, O'Toole, Gerstein, Murray & Bicknell
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 700
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Functionalized poly(hydroxyalkanoate) derivatives having the general structural formula: ##STR1## wherein Y is hydrogen, a saccharide moiety or an alkenyl moiety having a molecular weight in the range of from about 25 to about 100,000; R.sub.1, R.sub.2 and R.sub.3 are, independently, hydrogen, an aromatic moiety, an alkyl moiety or an alkenyl moiety, said alkyl moiety or alkenyl moiety including from one to about nine carbon atoms; A is carbonyl or methylene; X is oxygen or imino (--NH); Z is selected from the group consisting of hydrogen, a saccharide moiety, an alkyl moiety and an alkenyl moiety having a molecular weight in the range of from about 25 to about 100,000, with the proviso that if Y is hydrogen, Z is not hydrogen; r.sub.1, r.sub.2 and r.sub.3 are, independently, a numeral 1, 2 or 3; m and n are, independently, a numeral in the range of from one to about 5; and q is a numeral in the range of from about 5 to about 10,000, and a novel method of manufacturing the functionalized poly(hydroxyalkanoate) derivatives, are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 50 OF 58 USPAT2 on STN
AN 2006:227892 USPAT2
TI Compositions containing, methods involving, and uses of non-natural amino acids and polypeptides
IN Miao, Zhenwei, San Diego, CA, UNITED STATES
Liu, Junjie, San Diego, CA, UNITED STATES
Norman, Thea, San Diego, CA, UNITED STATES
Driver, Russell, Solana Beach, CA, UNITED STATES
PA Ambrx, Inc., La Jolla, CA, UNITED STATES (U.S. corporation)
PI US 7332571 B2 20080219
AI US 2005-313306 20051221 (11)
PRAI US 2005-696210P 20050701 (60)
US 2005-696302P 20050701 (60)
US 2005-696068P 20050701 (60)
US 2004-638418P 20041222 (60)
US 2004-638527P 20041222 (60)
US 2004-639195P 20041222 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Gupta, Anish; Assistant Examiner: Ha, Julie
LREP Wilson, Sonsini Goodrich & Rosati
CLMN Number of Claims: 6
ECL Exemplary Claim: 1
DRWN 65 Drawing Figure(s); 65 Drawing Page(s)
LN.CNT 13946
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Disclosed herein are non-natural amino acids and polypeptides that include at least one non-natural amino acid, and methods for making such non-natural amino acids and polypeptides. The non-natural amino acids, by themselves or as a part of a polypeptide, can include a wide range of possible functionalities, but typical have at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Also disclosed herein are non-natural amino acid polypeptides that are further modified

post-translationally, methods for effecting such modifications, and methods for purifying such polypeptides. Typically, the modified non-natural amino acid polypeptides include at least one oxime, carbonyl, dicarbonyl, and/or hydroxylamine group. Further disclosed are methods for using such non-natural amino acid polypeptides and modified non-natural amino acid polypeptides, including therapeutic, diagnostic, and other biotechnology uses.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 51 OF 58 USPAT2 on STN
AN 2005:144311 USPAT2
TI Polymer grafting by polysaccharide synthases
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
PA The Board of Regents of the University of Oklahoma, Norman, OK, UNITED STATES (U.S. corporation)
PI US 7060469 B2 20060613
AI US 2002-197153 20020716 (10)
RLI Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, Pat. No. US 6444447
PRAI US 1998-80414P 19980402 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Nashed, Nashaat T.
LREP Dunlap, Codding & Rogers, P.C.
CLMN Number of Claims: 13
ECL Exemplary Claim: 1
DRWN 11 Drawing Figure(s); 11 Drawing Page(s)
LN.CNT 2469
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate synthase from Pasteurella multocida.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 52 OF 58 USPAT2 on STN
AN 2004:300227 USPAT2
TI Branched cyclic tetrasaccharide, process for producing the same, and use
IN Aga, Hajime, Okayama, JAPAN
Higashiyama, Takanobu, Okayama, JAPAN
Watanabe, Hikaru, Okayama, JAPAN
Sonoda, Tomohiko, Okayama, JAPAN
Kubota, Michio, Okayama, JAPAN
PA Kabushiki Kaisha Hayashibara Seibutsu Kagaku Kenkyujo, Okayama, JAPAN (non-U.S. corporation)
PI US 7223570 B2 20070529
WO 2002072594 20020919
AI US 2002-471377 20020308 (10)
WO 2002-JP2213 20020308
20030909 PCT 371 date
PRAI JP 2001-67282 20010309
DT Utility
FS GRANTED
EXNAM Primary Examiner: Maier, Leigh C.
LREP Browdy and Neimark, PLLC
CLMN Number of Claims: 29
ECL Exemplary Claim: 1
DRWN 25 Drawing Figure(s); 20 Drawing Page(s)
LN.CNT 3352

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The object of the present invention is to provide a novel glycosyl derivative of cyclotetrasaccharide represented by cyclo{→6)-α-D-glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→6)-α-D-glucopyranosyl-(1→3)-α-D-glucopyranosyl-(1→}, and it is solved by providing a branched cyclotetrasaccharide, wherein one or more hydrogen atoms in the hydroxyl groups of cyclotetrasaccharide are replaced with an optionally substituted glycosyl group, with the proviso that, when only one hydrogen atom in the C-6 hydroxyl group among the above hydrogen atoms is substituted with an optionally-substituted glycosyl group, the substituted glycosyl group is one selected from those excluding D-glucosyl group.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 53 OF 58 USPAT2 on STN
AN 2004:171982 USPAT2
TI Targeted glycosaminoglycan polymers by polymer grafting and methods of making and using same
IN DeAngelis, Paul L., Edmond, OK, UNITED STATES
Jing, Wei, Edmond, OK, UNITED STATES
PA The Board of Regents of the Universtiy of Oklahoma, Norman, OK, UNITED STATES (U.S. corporation)
PI US 7223571 B2 20070529
AI US 2003-642248 20030815 (10)
RLI Continuation-in-part of Ser. No. US 2002-195908, filed on 15 Jul 2002, PENDING Continuation-in-part of Ser. No. US 1999-437277, filed on 10 Nov 1999, Pat. No. US 6444447, issued on 3 Sep 2002 Continuation-in-part of Ser. No. US 1999-283402, filed on 1 Apr 1999, ABANDONED Continuation-in-part of Ser. No. US 2001-842484, filed on 25 Apr 2001, ABANDONED Continuation-in-part of Ser. No. US 2002-142143, filed on 8 May 2002, PENDING
PRAI US 2003-491362P 20030731 (60)
US 2003-479432P 20030618 (60)
US 2002-404356P 20020816 (60)
US 2000-199538P 20000425 (60)
US 2001-289554P 20010508 (60)
US 1998-107929P 19981111 (60)
US 1998-80414P 19980402 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Nashed, Nashaat T.
LREP Dunlap, Codding & Rogers, P.C.
CLMN Number of Claims: 52
ECL Exemplary Claim: 1
DRWN 40 Drawing Figure(s); 40 Drawing Page(s)
LN.CNT 8444
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to methodology for polymer grafting by a polysaccharide synthase and, more particularly, polymer grafting using the hyaluronate or chondroitin or heparin/heparosan synthases from Pasteurella, in order to create a variety of glycosaminoglycan oligosaccharides having a natural or chimeric or hybrid sugar structure with a targeted size that are substantially monodisperse in size.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 54 OF 58 USPAT2 on STN
AN 2004:65289 USPAT2
TI Chitinase encoding DNA molecules from cotton expressed preferentially in

secondary walled cells during secondary wall deposition and a corresponding promoter
IN Haigler, Candace H., Lubbock, TX, UNITED STATES
Zhang, Hong, Lubbock, TX, UNITED STATES
Wu, Chunfa, Lubbock, TX, UNITED STATES
Wan, Chun-Hua, Gaithersburg, MD, UNITED STATES
Zhang, Deshui, Lubbock, TX, UNITED STATES
PA Texas Tech University, Lubbock, TX, UNITED STATES (U.S. corporation)
PI US 7098324 B2 20060829
AI US 2003-350696 20030123 (10)
RLI Continuation-in-part of Ser. No. US 2001-918083, filed on 30 Jul 2001, ABANDONED
DT Utility
FS GRANTED
EXNAM Primary Examiner: Fox, David T.; Assistant Examiner: Baum, Stuart F.
LREP Nixon Peabody LLP
CLMN Number of Claims: 2
ECL Exemplary Claim: 2
DRWN 12 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 4536
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to isolated nucleic acid molecules encoding endogenous cotton chitinases and corresponding promoters, which are preferentially expressed in secondary walled cells during secondary wall deposition. The polypeptide encoded by the nucleic acid molecule, a DNA construct linking the isolated nucleic acid molecule with a promoter, the DNA construct incorporated in an expression system, a host cell, a plant, or a plant seed are also disclosed. The present invention also relates to a DNA construct linking the isolated promoters with a second DNA as well as expression systems, host cells, plants, or plant seeds containing the DNA construct. Methods of imparting resistance to insects and fungi, regulating the fiber cellulose content, and methods of expressing a gene preferentially in secondary walled cells during secondary wall deposition are also disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 55 OF 58 USPAT2 on STN
AN 2003:120094 USPAT2
TI In vivo incorporation of unnatural amino acids
IN Schultz, Peter, La Jolla, CA, UNITED STATES
Wang, Lei, San Diego, CA, UNITED STATES
Anderson, John Christopher, San Diego, CA, UNITED STATES
Chin, Jason William, San Diego, CA, UNITED STATES
Liu, David R., Lexington, MA, UNITED STATES
Magliery, Thomas J., North Haven, CT, UNITED STATES
Meggers, Eric L., Philadelphia, PA, UNITED STATES
Mehl, Ryan A., San Diego, CA, UNITED STATES
Pastrnak, Miro, San Diego, CA, UNITED STATES
Santoro, Steven William, San Diego, CA, UNITED STATES
Zhang, Zhiwen, San Diego, CA, UNITED STATES
PA The Scripps Research Institute, La Jolla, CA, UNITED STATES (U.S. corporation)
The Regents of the University of California, Oakland, CA, UNITED STATES (U.S. corporation)
PI US 7045337 B2 20060516
AI US 2002-126927 20020419 (10)
PRAI US 2002-355514P 20020206 (60)
US 2001-285030P 20010419 (60)
DT Utility
FS GRANTED

EXNAM Primary Examiner: Prouty, Rebecca E.; Assistant Examiner: Gebreyesus, Kagnew
LREP Quine Intellectual Property Law Group, P.C.
CLMN Number of Claims: 15
ECL Exemplary Claim: 1
DRWN 40 Drawing Figure(s); 37 Drawing Page(s)
LN.CNT 8863
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention provides methods and compositions for in vivo incorporation of unnatural amino acids. Also provided are compositions including proteins with unnatural amino acids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L22 ANSWER 56 OF 58 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 2003:433502 BIOSIS
DN PREV200300433502
TI Angiotensin I converting enzyme (ACE) inhibitory activity of hetero-chitooligosaccharides prepared from partially different deacetylated chitosans.
AU Park, Pyo-Jam; Je, Jae-Young; Kim, Se-Kwon [Reprint Author]
CS Department of Chemistry, Pukyong National University, Busan, 608-737, South Korea
sknkim@mail.pknu.ac.kr
SO Journal of Agricultural and Food Chemistry, (August 13 2003) Vol. 51, No. 17, pp. 4930-4934. print.
CODEN: JAFCAU. ISSN: 0021-8561.
DT Article
LA English
ED Entered STN: 17 Sep 2003
Last Updated on STN: 17 Sep 2003
AB Angiotensin I converting enzyme (ACE) inhibitory activity of hetero-chitooligosaccharides (hetero-COSs) prepared from partially different deacetylated chitosans was investigated. Partially deacetylated chitosans, 90, 75, and 50% deacetylated chitosan, were prepared from crab chitin by N-deacetylation with 40% sodium hydroxide solution for durations. In addition, nine kinds of hetero-COSs with relatively high molecular masses (5000-10 000 Da; 90-HMWCOSs, 75-HMWCOSs, and 50-HMWCOSs), medium molecular masses (1000-5000 Da; 90-MMWCOSs, 75-MMWCOSs, and 50-MMWCOSs), and low molecular masses (below 1000 Da; 90-LMWCOSs, 75-LMWCOSs, and 50-LMWCOSs) were prepared using an ultrafiltration membrane bioreactor system. ACE inhibitory activity of hetero-COSs was dependent on the degree of deacetylation of chitosans. 50-MMWCOSs that are COSs hydrolyzed from 50% deacetylated chitosan, the relatively lowest degree of deacetylation, exhibited the highest ACE inhibitory activity, and the IC50 value was 1.22+-0.13 mg/mL. In addition, the ACE inhibition pattern of the 50-MMWCOSs was investigated by Lineweaver-Burk plots, and the inhibition pattern was found to be competitive.

L22 ANSWER 57 OF 58 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 2002:134269 BIOSIS
DN PREV200200134269
TI In vitro antimicrobial activity of a chitooligosaccharide mixture against Actinobacillus actinomycetemcomitans and Streptococcus mutans.
AU Choi, Bong-Kyu; Kim, Kwang-Yoon; Yoo, Yun-Jung; Oh, Suk-Jung; Choi, Jong-Hoon [Reprint author]; Kim, Chong-Youl
CS Department of Oral Medicine, College of Dentistry, Yonsei University,

Seoul, South Korea
ohisto@yumc.yonsei.ac.kr
SO International Journal of Antimicrobial Agents, (December, 2001) Vol. 18, No. 6, pp. 553-557. print.
ISSN: 0924-8579.
DT Article
LA English
ED Entered STN: 6 Feb 2002
Last Updated on STN: 26 Feb 2002
AB The purpose of this study was to evaluate the in vitro antibacterial activity of a chitooligosaccharide mixture (MW 2000-30 000 Da) with a deacetylation degree of 91.5% against two representative oral pathogens, Actinobacillus actinomycetemcomitans and Streptococcus mutans. A 0.1% concentration of the chitooligosaccharides (derived from the exoskeletons of marine crustaceans) was used to estimate antibacterial activity. Approximately 2 log colony forming units (CFU)/ml of A. actinomycetemcomitans were inactivated by 0.1% chitosan after 30 min, while 120 min exposure inactivated about 4.5 log CFU/ml of this organism. In contrast, the level of inactivation against S. mutans was less than 0.5 log CFU/ml after an exposure of up to 120 min. Electron microscopy showed that the exposure of A. actinomycetemcomitans to the chitooligosaccharides resulted in the disruption of cell membranes and that it could be considered for the treatment of periodontal diseases associated with A. actinomycetemcomitans.

L22 ANSWER 58 OF 58 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 1992:325391 BIOSIS
DN PREV199294027232; BA94:27232
TI PURIFICATION AND CHARACTERIZATION OF CHITINASE FROM GREEN ONION.
AU KIM Y S [Reprint author]; LEE M Y; PARK Y M
CS NATURAL PRODUCTS RES INST, SEOUL NATL UNIV, SEOUL 110-460, KOREA
SO Korean Biochemical Journal, (1992) Vol. 25, No. 2, pp. 171-177.
CODEN: KBCJAK. ISSN: 0368-4881.
DT Article
FS BA
LA ENGLISH
ED Entered STN: 11 Jul 1992
Last Updated on STN: 11 Jul 1992
AB Chitinase (EC 3.2.1.14) was purified from the mature tissue of green onion by ammonium sulfate precipitation followed by affinity chromatography on a regenerated chitin and a Sephacryl HR-100. The purified enzyme gave a single band on polyacrylamide slab gel electrophoresis and its molecular weight was determined to be 35,000 Da using SDS-PAGE and HPLC-GPC. The isoelectric points of the enzyme were 3.5 and 7.2. The purified enzyme was stable on incubation at 50.degree. C for up to 20 min. Most of metal ions did not affect the activity significantly except that Ag+ and Hg2+ ions inhibited the enzyme activity at 10 mM concentration. HPLC analysis of the initial products from the digestion of colloidal chitin and chitooligosaccharides indicated that chitinase was endolytic in action, yielding oligomers from the dimer to higher oligosaccharides.

=> s Li Pengcheng/AU
'AU' IS NOT A VALID FIELD CODE
'AU' IS NOT A VALID FIELD CODE
L23 313 LI PENGCHENG/AU

=> s l23 and chitosan

L24 121 L23 AND CHITOSAN

=> s l24 and Oligo?
18 FILES SEARCHED...
L25 14 L24 AND OLIGO?

=> dis l25 1-14 bib abs

L25 ANSWER 1 OF 14 BABS COPYRIGHT 2008 BEILSTEIN MDL on STN
AN 6516228 BABS
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
SO Carbohydr. Res. (2005), 340(13), 2150 - 2153
CODEN: CRBRAT
DT Journal
AN 6516228 BABS
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

L25 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:267575 CAPLUS
TI Preparation and application of chitosan/chito-oligosaccharide quaternary ammonium salt
IN Xing, Ronge; Li, Pengcheng; Liu, Song
PA Institute of Oceanology, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 16pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 101130574	A	20080227	CN 2006-10047518	20060823
PRAI CN 2006-10047518		20060823		

AB The title quaternary ammonium salt has a structure shown in the invention, wherein, n is polymerization degree. The quaternary ammonium salt is chito-oligosaccharide quaternary ammonium salt (straw yellow powder) with mol. weight of 2-8kD when n is 5-30, or is chitosan quaternary ammonium salt (white powder) with mol. weight of 30-160kD when n is 75-500. The quaternary ammonium salt is prepared by the steps of: (1) weighing chitosan or chito-oligosaccharide, (2) adding distilled water, and heating to 60-80°C under stirring, (3) adding isopropanol and ammonia glycidotrimethyl chloride, and reacting for 3-7h, (4) adjusting pH to 5.5 with HCl, (5) dialyzing in distilled water with a

dialysis bag (mol. weight cutoff = 8,000), and concentrating, (6) adding acetone to obtain yellow or white precipitate, and precipitating at room temperature for 30-60min, and (7) vacuum-filtering, and vacuum-drying the filter cake at 50-70°C to obtain chitosan/chito-oligosaccharide quaternary ammonium salt. In step 2, the volume/weight ratio of distilled water to chitosan or chito-oligosaccharide is (10-15):1. In step 3, the volume/weight ratio of isopropanol to chitosan or chito-oligosaccharide is (3-5):1; the mol. ratio of ammonia glycidotrimethyl chloride to chitosan or chito-oligosaccharide is (3-5):1. The obtained chitosan /chito-oligosaccharide quaternary ammonium salt has high antioxidant activity (high removal performance on superoxide anion free radicals and hydroxyl free radicals, good reducing performance, and good chelation performance), high hygroscopicity and good moisture-retaining performance, and thus can be used as antioxidant or humectant for food and cosmetics.

L25 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:498444 CAPLUS
DN 144:490568
TI Preparation of chitooligosaccharide by degradation of chitosan under acidic and basic conditions
IN Li, Pengcheng; Guo, Zhanyong; Liu, Song; Xing, Ronge; Yu, Huahua; Wang, Pibo
PA Institute of Oceanology, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1680452	A	20051012	CN 2004-10020831	20040625
PRAI CN 2004-10020831		20040625		

AB The title method comprises dissolving chitosan by 1-5 vol% acid solution at the weight ratio of 1:(15-30) to give a viscous solution; reacting in presence of hydrogen peroxide at 50-80°C for 2-6 h; regulating pH to 7-10 by inorg. base, and reacting for 1-3 h; precipitating by ethanol 3-10 times of solution volume; separating and drying at below 60°.

L25 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:318572 CAPLUS
DN 144:406347
TI Method for preparing new low-toxicity fungicide for crops
IN Li, Pengcheng; Liu, Song; Xing, Ronge; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping
PA Institute of Oceanology, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1751576	A	20060329	CN 2004-10050480	20040922
PRAI CN 2004-10050480		20040922		

AB The method comprises degrading high mol. weight chitosan in 15-20 times 0.5-5% homogeneous solvent(hydrochloric acid or acetic acid) in the

presence of hydrogen peroxide(0.5-3 times of chitosan) under microwave radiation of 340-850 W for 2-10 min, cooling, adding metal compound(Cu or Zn) under stirring, allowing to react at room temperature for 2-12 h, precipitating with acetone and/or ethanol, washing deposition with 70-80% ethanol and then anhydrous ethanol, and drying at 50-80° to obtain oligochitosan-metal coordinated complex with general formula I. The chitosan has mol. weight of (50-100)*104 and deacylation ratio of 65-100%. The fungicide has high efficiency and low toxicity.

L25 ANSWER 5 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:921851 CAPLUS
DN 143:388798
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, 266071, Peop. Rep. China
SO Carbohydrate Research (2005), 340(13), 2150-2153
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier B.V.
DT Journal
LA English
AB The effect of inorg. salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different mol. wts. only by changing the reaction time and/or the radiation power, the addition of some inorg. salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation The mol. weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the mol. weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of mol. weight FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory mol. weight by the microwave irradiation-assisted inorg. salt method than by microwave irradiation without inorg. salts and conventional technol.
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 6 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:1023995 CAPLUS
DN 142:299712
TI Microwave degraded chito-oligosaccharide compound and its preparation
IN Li, Pengcheng; Xing, Rong'e; Liu, Song; Yu, Huahua
PA Institute of Oceanography, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1473857	A	20040211	CN 2003-138817	20030716
WO 2005007702	A1	20050127	WO 2003-CN847	20031008

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO,

CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

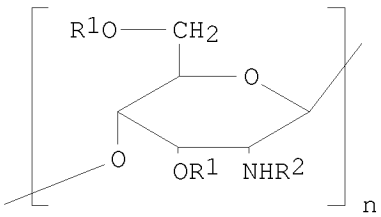
	AU 2003275508	A1	20050204	AU 2003-275508	20031008
	US 20070089978	A1	20070426	US 2005-560296	20051212
PRAI	CN 2003-138817	A	20030716		
	WO 2003-CN847	W	20031008		

AB The method comprises dissolving chitosan in an acidic NaCl (KCl, or CaCl2) electrolyte solution to obtain a viscous liquid, degrading the liquid via microwave irradiation (400-800W) for 3-12 min, neutralizing, precipitating at 4°, drying at 60°, and grinding to 20-100 mesh.

L25 ANSWER 7 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:1009846 CAPLUS
DN 142:191282
TI Medical compound for preventing and treating diabetes mellitus and its preparation
IN Li, Pengcheng; Xing, Rong'e; Liu, Song; Yu, Huahua
PA Institute of Oceanography, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1472218	A	20040204	CN 2003-138785	20030705
PRAI	CN 2003-138785		20030705		

GI



AB The chito-oligose sulfate and/or chitosan sulfate with formula I (where: n = 3 - 600; R1 = SO3Na or H; R2 = SO3Na, H, or Ac, but only one of R1 and R2 = H or Ac) with sulfate content of 40.73 - 42.21% are prepared by dissolving chitosan in 2% acetic acid under ultrasonic wave irradiation, neutralizing, drying to obtain chito-oligose, sulfonating with SO3/DMF in formamide in the presence of formic acid or dichloroacetic acid at 40 - 60 °C for 1 - 2 h, precipitating with 95% ethanol at 4 °C for 30 min to obtain crude product, dissolving in water, neutralizing, dialyzing or ultrafiltering, crystallizing at

low temperature, and freeze drying. The chito-oligose sulfate and/or chitosan sulfate may be used to prepare the medical prepns. for preventing and treating diabetes mellitus.

L25 ANSWER 8 OF 14 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:830847 CAPLUS
DN 142:23434
TI Preparation of low-molecular-weight and high-sulfate-content chitosans under microwave radiation and their potential antioxidant activity in vitro
AU Xing, Ronge; Liu, Song; Yu, Huahua; Zhang, Quanbin; Li, Zhien; Li, Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, 266071, Peop. Rep. China
SO Carbohydrate Research (2004), 339(15), 2515-2519
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier B.V.
DT Journal
LA English
AB In the present paper microwave radiation has been used to introduce N-sulfo and O-sulfo groups into chitosan with a high degree of substitution and low-mol. weight The sulfation of chitosan was performed in microwave ovens. It was found that microwave heating is a convenient way to obtain a wide range of products of different degrees of substitution and mol. weight only by changing reaction time or/and radiation power. Moreover, microwave radiation accelerated the degradation of sulfated chitosan, and the mol. weight of sulfated chitosan was considerably lower than that obtained by traditional heating. There are no differences in the chemical structure of sulfated chitosan obtained by microwave and by conventional technol. FTIR and 13C NMR spectral analyses demonstrated that a significantly shorter time is required to obtain a satisfactory degree of substitution and mol. weight by microwave radiation than by conventional technol. In this present paper, we also determined antioxidant activity of low-mol.-weight and high-sulfate-content chitosans (LCTS). The results showed LCTS could scavenge superoxide and hydroxyl radical. Its IC50 is 0.025 and 1.32 mg/mL, resp. It is a potential antioxidant in vitro.
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L25 ANSWER 9 OF 14 COMPENDEX COPYRIGHT 2008 EEI on STN
AN 2005(35):3706 COMPENDEX
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge (Institute of Oceanology Chinese Academy of Sciences, Qingdao 266071, China); Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
SO Carbohydrate Research v 340 n 13 Sep 26 2005 2005.p 2150-2153
CODEN: CRBRAT ISSN: 0008-6215
PY 2005
DT Journal
TC Experimental
LA English
AN 2005(35):3706 COMPENDEX
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded

chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology. 22 Refs.

L25 ANSWER 10 OF 14 IFIPAT COPYRIGHT 2008 IFI on STN
AN 11439913 IFIPAT;IFIUDB;IFICDB
TI LOW MOLECULAR WEIGHT CHITOSAN OLIGOSACCHARIDES AND ITS PREPARATION METHOD
INF Li; Pengcheng, Shandong, CN
Liu; Song, Shandong, CN
Xing; Ronge, Shandong, CN
Yu; Huahua, Shandong, CN
IN Li Pengcheng (CN); Liu Song (CN); Xing Ronge (CN); Yu Huahua (CN)
PAF INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, 266071, CN
PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES CN
PPA Institute of Oceanology Chinese Academy of Sciences CN (Probable)
AG SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US
PI US 2007089978 A1 20070426
AI US 2003-560296 20031008
WO 2003-CN847 20031008
20051212 PCT 371 date
20051212 PCT 102(e) date
PRAI CN 2003-138817 20030716
FI US 2007089978 20070426
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
ED Entered STN: 26 Apr 2007
Last Updated on STN: 7 May 2007
CLMN 11
GI 7 Figure(s).
FIG. 1 is a FTIR spectrum of chitosan.
FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.
FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.
FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.
FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.
FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.
FIG. 7 is a characteristic structure of chitosan oligosaccharides.
AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480800 W for 312 min. After irradiation ceased, the reaction

liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 110 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CLMN 11 7 Figure(s).

FIG. 1 is a FTIR spectrum of chitosan.

FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.

FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.

FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.

FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.

FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.

FIG. 7 is a characteristic structure of chitosan oligosaccharides.

L25 ANSWER 11 OF 14 USPATFULL on STN

AN 2007:104016 USPATFULL

TI Low molecular weight chitosan oligosaccharides and its preparation method

IN Li, Pengcheng, Shandong, CHINA
Xing, Ronge, Shandong, CHINA
Liu, Song, Shandong, CHINA
Yu, Huahua, Shandong, CHINA

PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, CHINA, 266071 (non-U.S. corporation)

PI US 2007089978 A1 20070426

AI US 2003-560296 A1 20031008 (10)
WO 2003-CN847 20031008
20051212 PCT 371 date

PRAI CN 2003-138817 20030716

DT Utility

FS APPLICATION

LREP SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 395

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480.about.800 W for 3.about.12 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 1.about.10 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the

present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L25 ANSWER 12 OF 14 MEDLINE on STN
AN 2005442207 MEDLINE
DN PubMed ID: 16040021
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing Ronge; Liu Song; Yu Huahua; Guo Zhanyong; Wang Pibo; Li Cuiping; Li Zhien; Li Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, China.
SO Carbohydrate research, (2005 Sep 26) Vol. 340, No. 13, pp. 2150-3. Journal code: 0043535. ISSN: 0008-6215.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LA English
FS Priority Journals
EM 200512
ED Entered STN: 20 Aug 2005
Last Updated on STN: 15 Dec 2005
Entered Medline: 2 Dec 2005
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

L25 ANSWER 13 OF 14 EMBASE COPYRIGHT (c) 2008 Elsevier B.V. All rights reserved on STN
AN 2005370427 EMBASE
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng (correspondence)
CS Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, China. xingronge@ms.qdio.ac.cn; pcli@ms.qdio.ac.cn
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping
CS Graduate School of the Chinese Academy of Sciences, Beijing 100039, China. xingronge@ms.qdio.ac.cn
SO Carbohydrate Research, (26 Sep 2005) Vol. 340, No. 13, pp. 2150-2153.
Refs: 22
ISSN: 0008-6215 CODEN: CRBRAT

PUI S 0008-6215(05)00317-4
CY United Kingdom
DT Journal; Article
FS 029 Clinical and Experimental Biochemistry
LA English
SL English
ED Entered STN: 9 Sep 2005
Last Updated on STN: 9 Sep 2005
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

L25 ANSWER 14 OF 14 BIOSIS
AN 2005:538673 BIOSIS
DN PREV200510313286
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng [Reprint Author]
CS Chinese Acad Sci, Inst Oceanol, Qingdao 266071, Peoples R China
xingronge@ms.qdio.ac.cn; pcli@ms.qdio.ac.cn
SO Carbohydrate Research, (SEP 26 2005) Vol. 340, No. 13, pp. 2150-2153.
CODEN: CRBRAT. ISSN: 0008-6215.
DT Article
LA English
ED Entered STN: 1 Dec 2005
Last Updated on STN: 1 Dec 2005
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight.FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

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=> s Xing Ronge/AU
'AU' IS NOT A VALID FIELD CODE
'AU' IS NOT A VALID FIELD CODE
L26        143 XING RONGE/AU

=> s l26 and chitosan
L27        107 L26 AND CHITOSAN

=> s l27 and oligo?
  15 FILES SEARCHED...
L28         12 L27 AND OLIGO?

=> dis l28 1-12 bib abs

L28  ANSWER 1 OF 12 BABS COPYRIGHT 2008 BEILSTEIN MDL on STN
AN   6516228  BABS
TI   Salt-assisted acid hydrolysis of chitosan to oligomers
     under microwave irradiation
AU   Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo;
     Li, Cuiping; Li, Zhien; Li, Pengcheng
SO   Carbohydr. Res. (2005), 340(13), 2150 - 2153
     CODEN: CRBRAT
DT   Journal
AN   6516228  BABS
AB   The effect of inorganic salts such as sodium chloride on the hydrolysis of
     chitosan in a microwave field was investigated. While it is known
     that microwave heating is a convenient way to obtain a wide range of
     products of different molecular weights only by changing the reaction time
     and/or the radiation power, the addition of some inorganic salts was shown
     to effectively accelerate the degradation of chitosan under
     microwave irradiation. The molecular weight of the degraded
     chitosan obtained by microwave irradiation was considerably lower
     than that obtained by traditional heating. Moreover, the molecular weight
     of degraded chitosan obtained by microwave irradiation assisted
     under the conditions of added salt was considerably lower than that
     obtained by microwave irradiation without added salt. Furthermore, the
     effect of ionic strength of the added salts was not linked with the change
     of molecular weight. FTIR spectral analyses demonstrated that a
     significantly shorter time was required to obtain a satisfactory molecular
     weight by the microwave irradiation-assisted inorganic salt method than by
     microwave irradiation without inorganic salts and conventional technology.

L28  ANSWER 2 OF 12  CAPLUS  COPYRIGHT 2008 ACS on STN
AN   2008:267575  CAPLUS
TI   Preparation and application of chitosan/chito-
     oligosaccharide quaternary ammonium salt
IN   Xing, Ronge; Li, Pengcheng; Liu, Song
PA   Institute of Oceanology, Chinese Academy of Sciences, Peop. Rep. China
SO   Faming Zhuanli Shenqing Gongkai Shuomingshu, 16pp.
     CODEN: CNXXEV
DT   Patent
LA   Chinese
FAN.CNT 1
     PATENT NO.          KIND   DATE        APPLICATION NO.        DATE
     ---------------     ----   --------    --------------------   --------
PI   CN 101130574         A     20080227    CN 2006-10047518       20060823
PRAI CN 2006-10047518           20060823
AB   The title quaternary ammonium salt has a structure shown in the invention,
     wherein, n is polymerization degree.  The quaternary ammonium salt is chito-
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oligosaccharide quaternary ammonium salt (straw yellow powder) with mol. weight of 2-8kD when n is 5-30, or is chitosan quaternary ammonium salt (white powder) with mol. weight of 30-160kD when n is 75-500. The quaternary ammonium salt is prepared by the steps of: (1) weighing chitosan or chito-oligosaccharide, (2) adding distilled water, and heating to 60-80°C under stirring, (3) adding isopropanol and ammonia glycidotrimethyl chloride, and reacting for 3-7h, (4) adjusting pH to 5.5 with HCl, (5) dialyzing in distilled water with a dialysis bag (mol. weight cutoff = 8,000), and concentrating, (6) adding acetone to obtain yellow or white precipitate, and precipitating at room temperature for 30-60min, and (7) vacuum-filtering, and vacuum-drying the filter cake at 50-70°C to obtain chitosan/chito-oligosaccharide quaternary ammonium salt. In step 2, the volume/weight ratio of distilled water to chitosan or chito-oligosaccharide is (10-15):1. In step 3, the volume/weight ratio of isopropanol to chitosan or chito-oligosaccharide is (3-5):1; the mol. ratio of ammonia glycidotrimethyl chloride to chitosan or chito-oligosaccharide is (3-5):1. The obtained chitosan /chito-oligosaccharide quaternary ammonium salt has high antioxidant activity (high removal performance on superoxide anion free radicals and hydroxyl free radicals, good reducing performance, and good chelation performance), high hygroscopicity and good moisture-retaining performance, and thus can be used as antioxidant or humectant for food and cosmetics.

L28 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:498444 CAPLUS
DN 144:490568
TI Preparation of chitooligosaccharide by degradation of chitosan under acidic and basic conditions
IN Li, Pengcheng; Guo, Zhanyong; Liu, Song; Xing, Ronge; Yu, Huahua; Wang, Pibo
PA Institute of Oceanology, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 11 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CN 1680452	A	20051012	CN 2004-10020831	20040625
PRAI CN 2004-10020831		20040625		

AB The title method comprises dissolving chitosan by 1-5 vol% acid solution at the weight ratio of 1:(15-30) to give a viscous solution; reacting in presence of hydrogen peroxide at 50-80°C for 2-6 h; regulating pH to 7-10 by inorg. base, and reacting for 1-3 h; precipitating by ethanol 3-10 times of solution volume; separating and drying at below 60°.

L28 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:318572 CAPLUS
DN 144:406347
TI Method for preparing new low-toxicity fungicide for crops
IN Li, Pengcheng; Liu, Song; Xing, Ronge; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping
PA Institute of Oceanology, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 17 pp.
CODEN: CNXXEV
DT Patent

LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1751576	A	20060329	CN 2004-10050480	20040922
PRAI	CN 2004-10050480		20040922		

AB The method comprises degrading high mol. weight chitosan in 15-20 times 0.5-5% homogeneous solvent(hydrochloric acid or acetic acid) in the presence of hydrogen peroxide(0.5-3 times of chitosan) under microwave radiation of 340-850 W for 2-10 min, cooling, adding metal compound(Cu or Zn) under stirring, allowing to react at room temperature for 2-12 h, precipitating with acetone and/or ethanol, washing deposition with 70-80% ethanol and then anhydrous ethanol, and drying at 50-80° to obtain oligochitosan-metal coordinated complex with general formula I. The chitosan has mol. weight of (50-100)*104 and deacylation ratio of 65-100%. The fungicide has high efficiency and low toxicity.

L28 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:921851 CAPLUS
DN 143:388798
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, 266071, Peop. Rep. China
SO Carbohydrate Research (2005), 340(13), 2150-2153
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier B.V.
DT Journal
LA English
AB The effect of inorg. salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different mol. wts. only by changing the reaction time and/or the radiation power, the addition of some inorg. salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation The mol. weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the mol. weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of mol. weight FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory mol. weight by the microwave irradiation-assisted inorg. salt method than by microwave irradiation without inorg. salts and conventional technol.
RE.CNT 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:830847 CAPLUS
DN 142:23434
TI Preparation of low-molecular-weight and high-sulfate-content chitosans under microwave radiation and their potential antioxidant activity in vitro
AU Xing, Ronge; Liu, Song; Yu, Huahua; Zhang, Quanbin; Li, Zhien; Li, Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, 266071,

Peop. Rep. China
SO Carbohydrate Research (2004), 339(15), 2515-2519
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier B.V.
DT Journal
LA English
AB In the present paper microwave radiation has been used to introduce N-sulfo and O-sulfo groups into chitosan with a high degree of substitution and low-mol. weight The sulfation of chitosan was performed in microwave ovens. It was found that microwave heating is a convenient way to obtain a wide range of products of different degrees of substitution and mol. weight only by changing reaction time or/and radiation power. Moreover, microwave radiation accelerated the degradation of sulfated chitosan, and the mol. weight of sulfated chitosan was considerably lower than that obtained by traditional heating. There are no differences in the chemical structure of sulfated chitosan obtained by microwave and by conventional technol. FTIR and 13C NMR spectral analyses demonstrated that a significantly shorter time is required to obtain a satisfactory degree of substitution and mol. weight by microwave radiation than by conventional technol. In this present paper, we also determined antioxidant activity of low-mol.-weight and high-sulfate-content chitosans (LCTS). The results showed LCTS could scavenge superoxide and hydroxyl radical. Its IC50 is 0.025 and 1.32 mg/mL, resp. It is a potential antioxidant in vitro.
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 7 OF 12 COMPENDEX COPYRIGHT 2008 EEI on STN
AN 2005(35):3706 COMPENDEX
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge (Institute of Oceanology Chinese Academy of Sciences, Qingdao 266071, China); Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
SO Carbohydrate Research v 340 n 13 Sep 26 2005 2005.p 2150-2153
CODEN: CRBRAT ISSN: 0008-6215
PY 2005
DT Journal
TC Experimental
LA English
AN 2005(35):3706 COMPENDEX
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology. 22 Refs.

L28 ANSWER 8 OF 12 IFIPAT COPYRIGHT 2008 IFI on STN

AN 11439913 IFIPAT;IFIUDB;IFICDB
TI LOW MOLECULAR WEIGHT CHITOSAN OLIGOSACCHARIDES AND ITS PREPARATION METHOD
INF Li; Pengcheng, Shandong, CN
Liu; Song, Shandong, CN
Xing; Ronge, Shandong, CN
Yu; Huahua, Shandong, CN
IN Li Pengcheng (CN); Liu Song (CN); Xing Ronge (CN); Yu Huahua (CN)
PAF INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, 266071, CN
PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES CN
PPA Institute of Oceanology Chinese Academy of Sciences CN (Probable)
AG SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US
PI US 2007089978 A1 20070426
AI US 2003-560296 20031008
WO 2003-CN847 20031008
20051212 PCT 371 date
20051212 PCT 102(e) date
PRAI CN 2003-138817 20030716
FI US 2007089978 20070426
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
ED Entered STN: 26 Apr 2007
Last Updated on STN: 7 May 2007
CLMN 11
GI 7 Figure(s).
FIG. 1 is a FTIR spectrum of chitosan.
FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.
FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.
FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.
FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.
FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.
FIG. 7 is a characteristic structure of chitosan oligosaccharides.
AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480800 W for 312 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 110 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.
CLMN 11 7 Figure(s).
FIG. 1 is a FTIR spectrum of chitosan.
FIG. 2 is a FTIR spectrum of low molecular weight chitosan

oligosaccharides obtained under acid solvent containing NaCl.
FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.
FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.
FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.
FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.
FIG. 7 is a characteristic structure of chitosan oligosaccharides.

L28 ANSWER 9 OF 12 USPATFULL on STN
AN 2007:104016 USPATFULL
TI Low molecular weight chitosan oligosaccharides and its preparation method
IN Li, Pengcheng, Shandong, CHINA
Xing, Ronge, Shandong, CHINA
Liu, Song, Shandong, CHINA
Yu, Huahua, Shandong, CHINA
PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, CHINA, 266071 (non-U.S. corporation)
PI US 2007089978 A1 20070426
AI US 2003-560296 A1 20031008 (10)
WO 2003-CN847 20031008
20051212 PCT 371 date
PRAI CN 2003-138817 20030716
DT Utility
FS APPLICATION
LREP SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480.about.800 W for 3.about.12 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 1.about.10 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L28 ANSWER 10 OF 12 MEDLINE on STN
AN 2005442207 MEDLINE
DN PubMed ID: 16040021
TI Salt-assisted acid hydrolysis of chitosan to oligomers

under microwave irradiation.
AU Xing Ronge; Liu Song; Yu Huahua; Guo Zhanyong; Wang Pibo; Li Cuiping; Li Zhien; Li Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, China.
SO Carbohydrate research, (2005 Sep 26) Vol. 340, No. 13, pp. 2150-3. Journal code: 0043535. ISSN: 0008-6215.
CY Netherlands
DT Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)
LA English
FS Priority Journals
EM 200512
ED Entered STN: 20 Aug 2005
Last Updated on STN: 15 Dec 2005
Entered Medline: 2 Dec 2005
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

L28 ANSWER 11 OF 12 EMBASE
AN 2005370427 EMBASE
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng (correspondence)
CS Institute of Oceanology, Chinese Academy of Sciences, Qingdao 266071, China. xingronge@ms.qdio.ac.cn; pcli@ms.qdio.ac.cn
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping
CS Graduate School of the Chinese Academy of Sciences, Beijing 100039, China. xingronge@ms.qdio.ac.cn
SO Carbohydrate Research, (26 Sep 2005) Vol. 340, No. 13, pp. 2150-2153. Refs: 22
ISSN: 0008-6215 CODEN: CRBRAT
PUI S 0008-6215(05)00317-4
CY United Kingdom
DT Journal; Article
FS 029 Clinical and Experimental Biochemistry
LA English
SL English
ED Entered STN: 9 Sep 2005
Last Updated on STN: 9 Sep 2005
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time

and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

L28 ANSWER 12 OF 12 BIOSIS COPYRIGHT (c) 2008 The Thomson Corporation on STN
AN 2005:538673 BIOSIS
DN PREV200510313286
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng [Reprint Author]
CS Chinese Acad Sci, Inst Oceanol, Qingdao 266071, Peoples R China
xingronge@ms.qdio.ac.cn; pcli@ms.qdio.ac.cn
SO Carbohydrate Research, (SEP 26 2005) Vol. 340, No. 13, pp. 2150-2153.
CODEN: CRBRAT. ISSN: 0008-6215.
DT Article
LA English
ED Entered STN: 1 Dec 2005
Last Updated on STN: 1 Dec 2005
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight.FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

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=> s Liu Song/AU
'AU' IS NOT A VALID FIELD CODE
'AU' IS NOT A VALID FIELD CODE
 75% OF LIMIT FOR L#S REACHED
L29        680 LIU SONG/AU

=> s l29 and (chitosan(a)oligo?)
L30          6 L29 AND (CHITOSAN(A) OLIGO?)

=> dis l30 1-6 bib abs
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L30 ANSWER 1 OF 6 BABS COPYRIGHT 2008 BEILSTEIN MDL on STN
AN 6516228 BABS
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
SO Carbohydr. Res. (2005), 340(13), 2150 - 2153
CODEN: CRBRAT
DT Journal
AN 6516228 BABS
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

L30 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:1023995 CAPLUS
DN 142:299712
TI Microwave degraded chito-oligosaccharide compound and its preparation
IN Li, Pengcheng; Xing, Rong'e; Liu, Song; Yu, Huahua
PA Institute of Oceanography, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1473857	A	20040211	CN 2003-138817	20030716
	WO 2005007702	A1	20050127	WO 2003-CN847	20031008
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003275508	A1	20050204	AU 2003-275508	20031008
	US 20070089978	A1	20070426	US 2005-560296	20051212
PRAI	CN 2003-138817	A	20030716		
	WO 2003-CN847	W	20031008		

AB The method comprises dissolving chitosan in an acidic NaCl (KCl, or CaCl2) electrolyte solution to obtain a viscous liquid, degrading the liquid via microwave irradiation (400-800W) for 3-12 min, neutralizing, precipitating at

4°, drying at 60°, and grinding to 20-100 mesh.

L30 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:830847 CAPLUS
DN 142:23434
TI Preparation of low-molecular-weight and high-sulfate-content chitosans under microwave radiation and their potential antioxidant activity in vitro
AU Xing, Ronge; Liu, Song; Yu, Huahua; Zhang, Quanbin; Li, Zhien; Li, Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, 266071, Peop. Rep. China
SO Carbohydrate Research (2004), 339(15), 2515-2519
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier B.V.
DT Journal
LA English
AB In the present paper microwave radiation has been used to introduce N-sulfo and O-sulfo groups into chitosan with a high degree of substitution and low-mol. weight The sulfation of chitosan was performed in microwave ovens. It was found that microwave heating is a convenient way to obtain a wide range of products of different degrees of substitution and mol. weight only by changing reaction time or/and radiation power. Moreover, microwave radiation accelerated the degradation of sulfated chitosan, and the mol. weight of sulfated chitosan was considerably lower than that obtained by traditional heating. There are no differences in the chemical structure of sulfated chitosan obtained by microwave and by conventional technol. FTIR and 13C NMR spectral analyses demonstrated that a significantly shorter time is required to obtain a satisfactory degree of substitution and mol. weight by microwave radiation than by conventional technol. In this present paper, we also determined antioxidant activity of low-mol.-weight and high-sulfate-content chitosans (LCTS). The results showed LCTS could scavenge superoxide and hydroxyl radical. Its IC50 is 0.025 and 1.32 mg/mL, resp. It is a potential antioxidant in vitro.
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L30 ANSWER 4 OF 6 COMPENDEX COPYRIGHT 2008 EEI on STN
AN 2005(35):3706 COMPENDEX
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge (Institute of Oceanology Chinese Academy of Sciences, Qingdao 266071, China); Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
SO Carbohydrate Research v 340 n 13 Sep 26 2005 2005.p 2150-2153
CODEN: CRBRAT ISSN: 0008-6215
PY 2005
DT Journal
TC Experimental
LA English
AN 2005(35):3706 COMPENDEX
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan

obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology. $CPY 2005 Elsevier Ltd. All rights reserved. 22 Refs.

L30 ANSWER 5 OF 6 IFIPAT COPYRIGHT 2008 IFI on STN
AN 11439913 IFIPAT;IFIUDB;IFICDB
TI LOW MOLECULAR WEIGHT CHITOSAN OLIGOSACCHARIDES AND ITS PREPARATION METHOD
INF Li; Pengcheng, Shandong, CN
Liu; Song, Shandong, CN
Xing; Ronge, Shandong, CN
Yu; Huahua, Shandong, CN
IN Li Pengcheng (CN); Liu Song (CN); Xing Ronge (CN); Yu Huahua (CN)
PAF INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, 266071, CN
PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES CN
PPA Institute of Oceanology Chinese Academy of Sciences CN (Probable)
AG SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US
PI US 2007089978 A1 20070426
AI US 2003-560296 20031008
WO 2003-CN847 20031008
20051212 PCT 371 date
20051212 PCT 102(e) date
PRAI CN 2003-138817 20030716
FI US 2007089978 20070426
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
ED Entered STN: 26 Apr 2007
Last Updated on STN: 7 May 2007
CLMN 11
GI 7 Figure(s).
FIG. 1 is a FTIR spectrum of chitosan.
FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.
FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.
FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.
FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.
FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.
FIG. 7 is a characteristic structure of chitosan oligosaccharides.
AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480800 W for 312 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 110 M NaOH or KOH and obtained the pale yellow floc. The

processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CLMN 11 7 Figure(s).

FIG. 1 is a FTIR spectrum of chitosan.

FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.

FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.

FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.

FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.

FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.

FIG. 7 is a characteristic structure of chitosan oligosaccharides.

L30 ANSWER 6 OF 6 USPATFULL on STN

AN 2007:104016 USPATFULL

TI Low molecular weight chitosan oligosaccharides and its preparation method

IN Li, Pengcheng, Shandong, CHINA
Xing, Ronge, Shandong, CHINA
Liu, Song, Shandong, CHINA
Yu, Huahua, Shandong, CHINA

PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, CHINA, 266071 (non-U.S. corporation)

PI US 2007089978 A1 20070426

AI US 2003-560296 A1 20031008 (10)
WO 2003-CN847 20031008
20051212 PCT 371 date

PRAI CN 2003-138817 20030716

DT Utility

FS APPLICATION

LREP SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN 3 Drawing Page(s)

LN.CNT 395

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480.about.800 W for 3.about.12 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 1.about.10 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become

active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s Yu Huahua/AU
'AU' IS NOT A VALID FIELD CODE
'AU' IS NOT A VALID FIELD CODE
L31 100 YU HUAHUA/AU

=> s l31 and (chitosan(a)oligo?)
L32 6 L31 AND (CHITOSAN(A) OLIGO?)

=> dis l32 1-6 bib abs

L32 ANSWER 1 OF 6 BABS COPYRIGHT 2008 BEILSTEIN MDL on STN
AN 6516228 BABS
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation
AU Xing, Ronge; Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng
SO Carbohydr. Res. (2005), 340(13), 2150 - 2153
CODEN: CRBRAT
DT Journal
AN 6516228 BABS
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology.

L32 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:1023995 CAPLUS
DN 142:299712
TI Microwave degraded chito-oligosaccharide compound and its preparation
IN Li, Pengcheng; Xing, Rong'e; Liu, Song; Yu, Huahua
PA Institute of Oceanography, Chinese Academy of Sciences, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 9 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1473857	A	20040211	CN 2003-138817	20030716
	WO 2005007702	A1	20050127	WO 2003-CN847	20031008

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CO,

CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM,
HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

AU	2003275508	A1	20050204	AU 2003-275508	20031008
US	20070089978	A1	20070426	US 2005-560296	20051212
PRAI CN	2003-138817	A	20030716		
WO	2003-CN847	W	20031008		

AB The method comprises dissolving chitosan in an acidic NaCl (KCl, or CaCl2) electrolyte solution to obtain a viscous liquid, degrading the liquid via microwave irradiation (400-800W) for 3-12 min, neutralizing, precipitating at 4°, drying at 60°, and grinding to 20-100 mesh.

L32 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:830847 CAPLUS
DN 142:23434
TI Preparation of low-molecular-weight and high-sulfate-content chitosans under microwave radiation and their potential antioxidant activity in vitro
AU Xing, Ronge; Liu, Song; Yu, Huahua; Zhang, Quanbin; Li, Zhien; Li, Pengcheng
CS Institute of Oceanology, The Chinese Academy of Sciences, Qingdao, 266071, Peop. Rep. China
SO Carbohydrate Research (2004), 339(15), 2515-2519
CODEN: CRBRAT; ISSN: 0008-6215
PB Elsevier B.V.
DT Journal
LA English
AB In the present paper microwave radiation has been used to introduce N-sulfo and O-sulfo groups into chitosan with a high degree of substitution and low-mol. weight The sulfation of chitosan was performed in microwave ovens. It was found that microwave heating is a convenient way to obtain a wide range of products of different degrees of substitution and mol. weight only by changing reaction time or/and radiation power. Moreover, microwave radiation accelerated the degradation of sulfated chitosan, and the mol. weight of sulfated chitosan was considerably lower than that obtained by traditional heating. There are no differences in the chemical structure of sulfated chitosan obtained by microwave and by conventional technol. FTIR and 13C NMR spectral analyses demonstrated that a significantly shorter time is required to obtain a satisfactory degree of substitution and mol. weight by microwave radiation than by conventional technol. In this present paper, we also determined antioxidant activity of low-mol.-weight and high-sulfate-content chitosans (LCTS). The results showed LCTS could scavenge superoxide and hydroxyl radical. Its IC50 is 0.025 and 1.32 mg/mL, resp. It is a potential antioxidant in vitro.
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L32 ANSWER 4 OF 6 COMPENDEX COPYRIGHT 2008 EEI on STN
AN 2005(35):3706 COMPENDEX
TI Salt-assisted acid hydrolysis of chitosan to oligomers under microwave irradiation.
AU Xing, Ronge (Institute of Oceanology Chinese Academy of Sciences, Qingdao 266071, China); Liu, Song; Yu, Huahua; Guo, Zhanyong; Wang, Pibo; Li, Cuiping; Li, Zhien; Li, Pengcheng

SO Carbohydrate Research v 340 n 13 Sep 26 2005 2005.p 2150-2153
CODEN: CRBRAT ISSN: 0008-6215
PY 2005
DT Journal
TC Experimental
LA English
AN 2005(35):3706 COMPENDEX
AB The effect of inorganic salts such as sodium chloride on the hydrolysis of chitosan in a microwave field was investigated. While it is known that microwave heating is a convenient way to obtain a wide range of products of different molecular weights only by changing the reaction time and/or the radiation power, the addition of some inorganic salts was shown to effectively accelerate the degradation of chitosan under microwave irradiation. The molecular weight of the degraded chitosan obtained by microwave irradiation was considerably lower than that obtained by traditional heating. Moreover, the molecular weight of degraded chitosan obtained by microwave irradiation assisted under the conditions of added salt was considerably lower than that obtained by microwave irradiation without added salt. Furthermore, the effect of ionic strength of the added salts was not linked with the change of molecular weight. FTIR spectral analyses demonstrated that a significantly shorter time was required to obtain a satisfactory molecular weight by the microwave irradiation-assisted inorganic salt method than by microwave irradiation without inorganic salts and conventional technology. 22 Refs.

L32 ANSWER 5 OF 6 IFIPAT COPYRIGHT 2008 IFI on STN
AN 11439913 IFIPAT;IFIUDB;IFICDB
TI LOW MOLECULAR WEIGHT CHITOSAN OLIGOSACCHARIDES AND ITS PREPARATION METHOD
INF Li; Pengcheng, Shandong, CN
Liu; Song, Shandong, CN
Xing; Ronge, Shandong, CN
Yu; Huahua, Shandong, CN
IN Li Pengcheng (CN); Liu Song (CN); Xing Ronge (CN); Yu Huahua (CN)
PAF INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, 266071, CN
PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES CN
PPA Institute of Oceanology Chinese Academy of Sciences CN (Probable)
AG SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US
PI US 2007089978 A1 20070426
AI US 2003-560296 20031008
WO 2003-CN847 20031008
20051212 PCT 371 date
20051212 PCT 102(e) date
PRAI CN 2003-138817 20030716
FI US 2007089978 20070426
DT Utility; Patent Application - First Publication
FS CHEMICAL
APPLICATION
ED Entered STN: 26 Apr 2007
Last Updated on STN: 7 May 2007
CLMN 11
GI 7 Figure(s).
FIG. 1 is a FTIR spectrum of chitosan.
FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.
FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.
FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.

FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.
FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.
FIG. 7 is a characteristic structure of chitosan oligosaccharides.

AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480800 W for 312 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 110 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CLMN 11 7 Figure(s).
FIG. 1 is a FTIR spectrum of chitosan.
FIG. 2 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing NaCl.
FIG. 3 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing KCl.
FIG. 4 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under acid solvent containing CaCl2.
FIG. 5 is a FTIR spectrum of low molecular weight chitosan oligosaccharides obtained under pure acid solvent.
FIG. 6 is a 1H NMR spectrum of low molecular weight chitosan oligosaccharides.
FIG. 7 is a characteristic structure of chitosan oligosaccharides.

L32 ANSWER 6 OF 6 USPATFULL on STN
AN 2007:104016 USPATFULL
TI Low molecular weight chitosan oligosaccharides and its preparation method
IN Li, Pengcheng, Shandong, CHINA
Xing, Ronge, Shandong, CHINA
Liu, Song, Shandong, CHINA
Yu, Huahua, Shandong, CHINA
PA INSTITUTE OF OCEANOLOGY CHINESE ACADEMY OF SCIENCES, Shandong, CHINA, 266071 (non-U.S. corporation)
PI US 2007089978 A1 20070426
AI US 2003-560296 A1 20031008 (10)
WO 2003-CN847 20031008
20051212 PCT 371 date
PRAI CN 2003-138817 20030716
DT Utility
FS APPLICATION
LREP SMITH, GAMBRELL & RUSSELL, 1850 M STREET, N.W., SUITE 800, WASHINGTON, DC, 20036, US
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 395

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to low molecular weight chitosan oligosaccharides and its preparation method. Chitosan oligosaccharides were obtained under microwave irradiation assisted the electrolyte. The method of preparing chitosan oligosaccharides was described as follows: acid solvent containing electrolyte was added to chitosan. The reaction was performed at 480.about.800 W for 3.about.12 min. After irradiation ceased, the reaction liquid was cooled to room temperature. Then the solution was adjusted to neutrality with 1.about.10 M NaOH or KOH and obtained the pale yellow floc. The processes of precipitation, filtering, desiccation and crushing are settled sequentially. Finally, chitosan oligosaccharides were obtained. Method of the present invention makes chitosan degrade to water-soluble chitosan oligosaccharides and it makes some inert substance become active. The method of the present invention can cut down energy consumption, decrease pollution and save time and raw materials. It has applying perspective of industry and potentiality of extensive market.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> dis hist

(FILE 'HOME' ENTERED AT 13:18:58 ON 03 APR 2008)

FILE 'APOLLIT, BABS, CAPLUS, CBNB, CIN, COMPENDEX, DISSABS, EMA, IFIPAT, NTIS, PASCAL, PROMT, RAPRA, SCISEARCH, TEXTILETECH, USPATFULL, USPATOLD, USPAT2, WPIFV, WPINDEX, WSCA, WTEXTILES, MEDLINE, EMBASE, BIOSIS' ENTERED AT 13:19:26 ON 03 APR 2008

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L1       115917 S CHITOSAN
L2        10733 S L1 AND (RADIATION OR IRRADIATION OR MICROWAVE)
L3         6604 S L2 AND (ELECTROLYTE OR CHLORIDE)
L4         3760 S L3 AND OLIGO?
L5         1800 S L2 AND MICROWAVE
L6         1176 S L5 AND (CHLORIDE OR ELECTROLYTE)
L7         1159 S L5 AND CHLORIDE
L8         1377 S L5 AND (SODIUM OR POTASSIUM OR CALCIUM OR IRON OR FERRIC)
L9         1326 S L8 AND ACID?
L10         905 S L9 AND (MOLECULAR(A)WEIGHT)
L11           3 S L10 AND (DEGREE(A)POLYMERIZ?)
L12        5892 S CHITOSAN(S)OLIGO?
L13         151 S L12 AND MICROWAVE
L14         113 S L13 AND (ELECTROLYTE OR CHLORIDE)
L15         112 S L14 AND ACID
L16           0 S L15 AND (DEGREE(W)POLYMER?)
L17          90 S L15 AND (DEGREE(S)POLYMER?)
L18          48 S L17 AND DA
L19        2691 S CHITOOLIGO?
L20         136 S L19 AND (DA OR DALTON)
L21          89 S L20 AND DEGREE
L22          58 S L21 AND (METHOD OR PROCESS)
L23         313 S LI PENGCHENG/AU
L24         121 S L23 AND CHITOSAN
L25          14 S L24 AND OLIGO?
L26         143 S XING RONGE/AU
L27         107 S L26 AND CHITOSAN
L28          12 S L27 AND OLIGO?
L29         680 S LIU SONG/AU
L30           6 S L29 AND (CHITOSAN(A)OLIGO?)
L31         100 S YU HUAHUA/AU
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L32 6 S L31 AND (CHITOSAN(A)OLIGO?)